

```

1  GGACACTGAC ATGGACTGAA GGAGTAGAAA GCTGGAGTGA CACTGCAGTG
51  GGCTTCTCCG TAGCCCCAGC CTTCAGGCTG CGCAGCCCCT AACCTGCCCG
101 CACCGCTTTT GGAAGCAGC TTGGCTCTTC CATCTCCCA AGCCTTCCTC
151 TCCATCCTTT CATCACCCC TCGCCGATCT TACTTTTTCT TTTACCCACG
201 GGGCCGCGGC CGGCCACCCC CTGGCCGGTG CAAACACCCA AGCCCTCTCC
251 AGTTCTCCCC CAAGCTAATA TTTTCCCACC TGTCTTTTTC TGGGGTTCCT
301 CCACGAGCCA GTCCAAGGCT CCCCATCCT CGGAAATTGT TTTGTTGGAC
351 TGCTAAACCG AGGCGTGTA AGCTTGAGGA CTTTATTATT ATTTGGGTTC
401 TTTTCATTTT TCCCCCTTCT GGGCAACGAA GCAATGAAAT TTCCAATCGA
451 GACGCCAAGA AACAGGTGA ACTGGGATCC TAAAGTGGCC GTTCCCGCAG
501 CAGCACCGGT GTGCCAGCCC AAGAGCGCCA CTAACGGGCA ACCCCCGGCT
551 CCGGCTCCGA CTCCAACTCC GCGCCTGTCC ATTTCTCTCC GAGCCACAGT
601 GGTAGCCAGG ATGGAAGGCA CCTCCAAGG GGGCTTGCG ACCGTCATGA
651 AGTGGAAGAC GGTGTTGCC ATCTTTGTGG TTGTGGTGGT CTACCTTGTC
701 ACTGGCGGTC TTGCTTCCG GGCATTGGAG CAGCCCTTTC AGAGCAGCCA
751 GAAGAATACC ATCGCCTTGG AGAAGGCGGA ATTCCTGCGG GATCATGTCT
801 GTGTGAGCCC CCAGGAGCTG GAGACGTTGA TCCAGCATGC TCTTGATGCT
851 GACAAATGCG GAGTCAGTCC AATAGGAAAC TCTTCCAACA ACAGCAGCCA
901 CTGGGACCTC GGCAGTGCCT TTTCTTTTGC TGGAACGTGC ATTACGACCA
951 TAGGGTATGG CAATATTGCT CCGAGCACTG AAGGAGGCAA AATCTTTTGT
1001 ATTTTATATG CCATCTTTGG AATTCCACTC TTTGGTTTCT TATTGGCTGG
1051 AATTGGAGAC CAACTTGGAA CCATCTTTGG GAAAAGCATT GCAAGAGTGG
1101 AGAAGGTCTT TCGAAAAAAG CAAGTGAGTC AGACCAAGAT CCGGGTCATC
1151 TCAACCATCC TGTTCATCTT GGCCGGCTGC ATTGTGTTTG TGACGATCCC
1201 TGCTGTCATC TTTAAGTACA TCGAGGGCTG GACGGCCTTG GAGTCCATTT
1251 ACTTTGTGGT GGTCACTCTG ACCACGGTGG GCTTTGGTGA TTTTGTGGCA
1301 GGGGAAACG CTGGCATCAA TTATCGGGAG TGGTATAAGC CCCTAGTGTG
1351 GTTTTGGATC CTTGTTGGCC TTGCCTACTT TGCAGCTGTC CTCAGTATGA
1401 TCGGAGATTG GCTACGGGTT CTGTCCAAAA AGACAAAAGA AGAGGTGGGT
1451 GAAATCAAGG CCCATGCGGC AGAGTGGAAG GCCAATGTCA CGGCTGAGTT
1501 CCGGGAGACA CGGCGAAGGC TCAGCGTGGA GATCCACGAT AAGCTGCAGC
1551 GGGCGGCCAC CATCCGCAGC ATGGAGCGCC GCGGCTGGG CCTGGACCAG
1601 CGGGCCCACT CACTGGACAT GCTGTCCCC GAGAAGCGCT CTGTCTTTGC
1651 TGCCCTGGAC ACCGGCCGCT TCAAGGCCTC ATCCAGGAG AGCATCAACA
1701 ACCGGCCCAA CAACCTGCGC CTGAAGGGGC CGGAGCAGCT GAACAAGCAT
1751 GGGCAGGGTG CGTCCGAGGA CAACATCATC AACAAGTTCG GGTCCACCTC
1801 CAGACTCACC AAGAGGAAAA ACAAGGACCT CAAAAAGACC TTGCCCAGAG
1851 ACGTTTCAGAA AATCTACAAG ACCTTCCGGA ATTACTCCCT GGACGAGGAG
1901 AAGAAAGAGG AGGAAACGGA AAAGATGTGT AACTCAGACA ACTCCAGCAC
1951 AGCCATGCTG ACGGACTGTA TCCAGCAGCA CGCTGAGTTG GAGAACGGAA
2001 TGATACCCAC GGACACCAA GACCGGGAGC CGGAGAACAA CTCATTACTT
2051 GAAGACAGAA ACTAA

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**FEATURES:**  
5'UTR: 1 - 433  
Start Codon: 434  
Stop Codon: 2063  
3'UTR: 2066  
**HOMOLOGOUS PROTEINS:**  
Top 10 BLAST Hits:

			Score	E
gi 10863961 ref NP_066984.1	potassium channel, subfamily K, me...	1054	0.0	
gi 8452900 gb AAF75132.1 AF196965_1 (AF196965)	potassium channe...	1037	0.0	
gi 6754432 ref NP_034737.1	potassium channel, subfamily K, mem...	486	e-136	
gi 5712621 gb AAD47569.1 AF129399_1 (AF129399)	TREK-1 potassium...	483	e-135	
gi 9622335 gb AAF89743.1 AF171068_1 (AF171068)	two-pore domain ...	483	e-135	
gi 4101566 gb AAD01203.1  (AF004711)	two-pore potassium channel...	473	e-132	
gi 7705562 ref NP_057695.1	potassium inwardly-rectifying chann...	318	9e-86	
gi 6680540 ref NP_032457.1	potassium channel, subfamily K, mem...	309	4e-83	
gi 9988112 emb CAC07336.1  (AL136087)	dJ137F1.2 (novel member o...	201	2e-50	
gi 4504851 ref NP_003731.1	potassium channel, subfamily K, mem...	180	4e-44	

BLAST to dbEST:

		Score	E
gi 3400036 /dataset=dbest /taxon=9606 ...		293	6e-77

**EXPRESSION INFORMATION FOR MODULATORY USE:**  
library source:  
Expression information from BLAST dbEST hit:  
gi|3400036 Human testis

Expression information from PCR-based tissue screening panels:  
Human bone marrow  
Human colon  
Human fetal brain  
Human fetal heart  
Human feftal liver  
Human heart  
Human kidney  
Human pancreas  
Human testis

```

1 MKFPIETPRK QVNWDPKVAV PAAAPVCQPK SATNGQPPAP APTPTPRLSI
51 SSRATVVARM EGTSQGGLQT VMKWKTVVAI FVVVVVYLVT GGLVFRALEQ
101 PFESSQKNTI ALEKAEFLRD HVCVSPQELE TLIQHALDAD NAGVSPIGNS
151 SNNSSHWDLG SAFFFAGTVI TTIGYGNIAF STEGGKIFCI LYAIFGIPLF
201 GFLLAGIGDQ LGTIFGKSIA RVEKVFRKKQ VSQTKIRVIS TILFILAGCI
251 VFVTIPAVIF KYIEGWTALE SIYFVVVTLT TVGFGDFVAG GNAGINYREW
301 YKPLVWFVIL VGLAYFAAVL SMIGDWLRVL SKKTKEEVGE IKAHAAEWKA
351 NVTAEFRETR RRLSVEIHDK LQRAATIRSM ERRRLGLDQR AHSLDMLSPE
401 KRSVFAALDT GRFKASSQES INNRPNNLRL KGPEQLNKHG QGASEDNIIN
451 KFGSTSRLTK RKNKDLKCTL PEDVQKIYKT FRNYSLDEEK KEEETEKMCN
501 SDNSSTAMLT DCIQQHAELE NGMIPTDTKD REPENNSLLE DRN

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#### FEATURES:

##### Functional domains and key regions:

[1] PDOC00001 PS00001 ASN\_GLYCOSYLATION

N-glycosylation site

Number of matches: 7

1	149-152	NSSN
2	152-155	NNSS
3	153-156	NSSH
4	351-354	NVTA
5	483-486	NYSL
6	503-506	NSST
7	535-538	NNSL

[2] PDOC00004 PS00004 CAMP\_PHOSPHO\_SITE

cAMP- and cGMP-dependent protein kinase phosphorylation site

361-364 RRLS

[3] PDOC00005 PS00005 PKC\_PHOSPHO\_SITE

Protein kinase C phosphorylation site

Number of matches: 12

1	7-9	TPR
2	45-47	TPR
3	7-9	TPR
4	45-47	TPR
5	51-53	SSR
6	105-107	SQK
7	331-333	SKK
8	359-361	TRR
9	376-378	TIR
10	410-412	TGR
11	455-457	TSR
12	459-461	TKR

[4] PDOC00006 PS00006 CK2\_PHOSPHO\_SITE

Casein kinase II phosphorylation site

Number of matches: 8

1	125-128	SPQE
2	155-158	SHWD
3	267-270	TALE
4	334-337	TKEE
5	416-419	SSQE
6	469-472	TLPE
7	485-488	SLDE
8	537-540	SLLE

[5] PDOC00008 PS00008 MYRISTYL

N-myristoylation site

Number of matches: 8

- 1 62-67 GTSQGG
- 2 66-71 GGLQTV
- 3 148-153 GNSSNN
- 4 167-172 GTVIIT
- 5 212-217 GTIFGK
- 6 290-295 GGNAGI
- 7 440-445 GQGASE

Membrane spanning structure and domains:

Helix	Begin	End	Score	Certainty
1	81	101	2.130	Certain
2	165	185	1.764	Certain
3	193	213	2.281	Certain
4	244	264	2.380	Certain
5	275	295	1.436	Certain
6	310	330	2.210	Certain



# BLAST Alignment to Top Hit:

```
>gi|10863961|ref|NP_066984.1| potassium channel, subfamily K, member
      10 [Homo sapiens] >gi|10198115|gb|AAG15191.1|AF279890_1
      (AF279890) 2P domain potassium channel TREK2 [Homo
      sapiens]
      Length = 538
```

Score = 1054 bits (2697), Expect = 0.0  
 Identities = 526/526 (100%), Positives = 526/526 (100%)  
 Frame = +1

```
Query: 52  VAVPAAAPVCQPKSATNGQPPAPAPTPTPRLSISSRATVVARMEGTSQGGGLQTMKWKT 231
Sbjct: 13  VAVPAAAPVCQPKSATNGQPPAPAPTPTPRLSISSRATVVARMEGTSQGGGLQTMKWKT 72

Query: 232  VAIFVVVVVYLVTGGLVFRALQPPFESSQKNTIALEKAEFLRDHVCVSPQELETLIQHAL 411
Sbjct: 73  VAIFVVVVVYLVTGGLVFRALQPPFESSQKNTIALEKAEFLRDHVCVSPQELETLIQHAL 132

Query: 412  DADNAGVSPIGNSSNNSSHWDLGSAPFFAGTVITTIGYGNIAPESTEGGKIFCILYAIIFI 591
Sbjct: 133 DADNAGVSPIGNSSNNSSHWDLGSAPFFAGTVITTIGYGNIAPESTEGGKIFCILYAIIFI 192

Query: 592  PLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVISTILFILAGCIVFVTIPA 771
Sbjct: 193 PLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVISTILFILAGCIVFVTIPA 252

Query: 772  VIFKYIEGWTALESIIYFVVVTLTTVGFGDFVAGGNAGINREWKPLVWFWILVGLAYFA 951
Sbjct: 253 VIFKYIEGWTALESIIYFVVVTLTTVGFGDFVAGGNAGINREWKPLVWFWILVGLAYFA 312

Query: 952  AVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRETRRRLSVEIHDKLQRAATI 1131
Sbjct: 313 AVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRETRRRLSVEIHDKLQRAATI 372

Query: 1132 RSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQESINNRPNLRLKGPEQLN 1311
Sbjct: 373 RSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQESINNRPNLRLKGPEQLN 432

Query: 1312 KHGQGASEDNIINKFGSTSRLTKRKNKDLKKTLPEDVQKIYKTFRNYSLDEEKKEEETEK 1491
Sbjct: 433 KHGQGASEDNIINKFGSTSRLTKRKNKDLKKTLPEDVQKIYKTFRNYSLDEEKKEEETEK 492

Query: 1492 MCNSDNSSTAMLTDCIQQAELNGMIPTDTKDREPENNSLLEDRN 1629
Sbjct: 493 MCNSDNSSTAMLTDCIQQAELNGMIPTDTKDREPENNSLLEDRN 538
```

```
>gi|8452900|gb|AAF75132.1|AF196965_1 (AF196965) potassium channel
      TREK-2 [Rattus norvegicus]
      Length = 538
```

Score = 1037 bits (2653), Expect = 0.0  
 Identities = 520/543 (95%), Positives = 529/543 (96%), Gaps = 1/543 (0%)  
 Frame = +1

```
Query: 1  MKFPIETPRKQVNWDPKVAVPAAAP-VCQPKSATNGQPPAPAPTPTPRLSISSRATVVAR 177
Sbjct: 1  MKFPIETPRKQVNWDPKVAVPAAAP VCQPKSATNG P P RLSISSRATVVAR 54

Query: 178  MEGTSQGGGLQTMKWKTVAIFVVVVVYLVTGGLVFRALQPPFESSQKNTIALEKAEFLR 357
Sbjct: 55  MEG SQGGGLQTMKWKTVAIFVVVVVYLVTGGLVFRALQPPFESSQKNTIALEKAEFLR 114
```

Query: 358 DHVCVSPQELETLIQHALLADADNAGVSPIGNSSNNSSHWDLGSAFFFAAGTVITTIGYGNIA 537  
 DH+CVSPQELETLIQHALLADADNAGVSP+GNSSN+SSHWDLGSAFFFAAGTVITTIGYGNIA  
 Sbjct: 115 DHICVSPQELETLIQHALLADADNAGVSPVGNSSNNSSHWDLGSAFFFAAGTVITTIGYGNIA 174

Query: 538 PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI 717  
 PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI  
 Sbjct: 175 PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI 234

Query: 718 STILFILAGCIVFVTIPAVIFKYIEGWTALESIFVVTTLTTVGFGDFVAGGNAGINYRE 897  
 STILFILAGCIVFVTIPAVIFKYIEGWTALESIFVVTTLTTVGFGDFVAGGNAGINYRE  
 Sbjct: 235 STILFILAGCIVFVTIPAVIFKYIEGWTALESIFVVTTLTTVGFGDFVAGGNAGINYRE 294

Query: 898 WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET 1077  
 WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET  
 Sbjct: 295 WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET 354

Query: 1078 RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE 1257  
 RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE  
 Sbjct: 355 RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE 414

Query: 1258 SINNRPNLRLKGPEQLNKHGQGASEDNIINKFGSTSRLTKRKNKDLKKTLPEDVQKIYK 1437  
 SINNRPNLRLKGPEQLNKHGQGASEDNIINKFGSTS+LTKRKNKDLKKTLPEDVQKIYK  
 Sbjct: 415 SINNRPNLRLKGPEQLNKHGQGASEDNIINKFGSTSRLTKRKNKDLKKTLPEDVQKIYK 474

Query: 1438 TFRNYSLDEEKKEEETKMCNSDNSSTAMLTDCIQQAELNGMIPTDTKDREPENNSLL 1617  
 TFRNYSLDEEKKE+ETKMCNSDNSSTAMLT+CIQQ AE+ENGM+P DTKD+ ENNSLL  
 Sbjct: 475 TFRNYSLDEEKKEDETEKMCNSDNSSTAMLTDCIQQAEMENGMVPMDDTKDQGLENNSSL 534

Query: 1618 EDRN 1629  
 EDRN  
 Sbjct: 535 EDRN 538

**Hmmer search results (Pfam):**

Model	Description	Score	E-value	N
PF00914	Transmembrane region cyclic Nucleotide Gated	17.5	0.00072	2

**Parsed for domains:**

Model	Domain	seq-f	seq-t	hmm-f	hmm-t	score	E-value
PF00914	1/2	161	201 ..	142	182 ..	15.7	0.0023
PF00914	2/2	271	286 ..	143	158 ..	8.0	0.33

1	CCTAAGGGTG	CAGTTCCTGC	CACAGGAATT	TGCCTTGGAC	AGTGAAGTAA
51	TTCCCCAATG	CAGACCCAG	AACACAACCA	TAGGTCAGTT	CATTTTGTCAA
101	AGGAGGAGGG	CCTGGAGGCT	TGGAATATAT	CGTATTTAGA	CCTTCATTAC
151	CCAAACGAAC	CCATGGGACA	GGTTCAGGGT	CAGATTCATG	GGTCCCCGGA
201	CTGGATGAGC	TCACAAGGTT	CTGGCATGGA	GAGCATGGAC	CTTTGTGTCA
251	ACAACTTGG	GTTTGAATCC	TCATATCGTG	ACCTTGGGAA	TGTTTCTTTA
301	TCTCTCTGAG	CCTTGATCTT	CTCATCTGTA	AAAGGAGGCC	AGTTACAGCT
351	TCTGCAAAAT	GATCTAACAA	AGATGAATGG	AGAGGAAATA	TGAGATGGTG
401	AGGGGGAATT	CAGTAAATGT	CAATCTTGCC	TCCCCGTGCT	CTGAGGACTC
451	AGGAGAGGGT	GTCTTTCTCT	GCTGAAGCCC	CTCTCTGACT	CTGATGCATG
501	TAAAAACAT	TGTATTGCAG	TGACTGTGCT	AGAGTCCAGC	TGTCCGTGAA
551	CAGTTAAAGA	GAAGAGCGCA	GAGGGAGGTT	CGAAAGCCTT	TCTTAGAAGC
601	ATCTCCCTCT	GGACTTGAGA	ACAGAAATTTA	CATACACACT	GGTGTCTCGG
651	GGCATGGCTG	GGAGAAGCAG	AGATTCCCTG	TTTGTTTGAT	TTCTATGTCT
701	TAGCCATCCT	CCCAGTCCTA	GTAGAGAGAG	GCAAAGTGTG	GTTACAGAGT
751	CCAGGGAAGA	TGGTCTTGAA	GCACCCGGGA	ACCTGCCTAA	AGGGCTGAAG
801	AGTCAGAGTA	GCACCATCAG	ATTGGTACCA	GTTTTGCCTG	AACGGGGTTT
851	GCAGAGAATT	CAGGGCTCCA	GCCTGGGGTG	CCTGTGACAG	CCCAGTGACA
901	AAGCACTCAC	CTTTCCACAC	GACCACAGCG	GACCTCTGTA	GGTCTTGCTC
951	TTGGACTCAG	AAACCTTGAT	GTGATAGTGA	GGGATGGATG	GTGAGAAAGA
1001	TGCTGCTGAC	AGCGAGCTCC	CCAGAAGCCT	CAAGGTGCCG	TAGAGTAGCA
1051	TGCAACTTAG	AGATCAGCTG	CTAGTGTGGG	ATTTTAGGAC	CCCAGCTGGC
1101	AGGCATAGGA	ATGAGCTGGG	CAATTTCTAT	GCGTAAGTAA	AGGCAACAAC
1151	AATCTAACAG	GACCTTATGG	CACATAGATAG	TAAGCCCCAT	GAAGGCAAGA
1201	TCTCTGTCTT	GTTCTCTGCC	ATATGGCCAG	CACATAGCAC	AGTGATGGCA
1251	CTTGGAAGGG	GTTCAATATA	TATGTTGAAT	GAACAACAAA	TTTTAGTAAC
1301	CTTATCTGGA	AGCCAGAGTA	GGGGTTTAAA	CTACTTCCTA	TCCAACACTG
1351	CAGCATGCAA	TTCTATGTCTT	CATTTAGCAA	GTATTTCTTG	AGCACCTACT
1401	ACGTGTAAGG	CTCCGTTGCG	AGGCATCCGA	AGCAATTTGT	CAGCATCATT
1451	CATGTTGATA	CTCGAGTGTA	CCC GTTCAAG	AGCACCTCAG	CACCACCTGG
1501	CTTTTCTGAA	GACTGAGGCC	CCACCACAAA	CCCCTGTGGG	GCTTCAAGCA
1551	GGGGCAGTGA	GAGGGCGTTA	GACGAATGCT	CCAGGTTTAG	CCCCTTTCCG
1601	GGAACAGGTC	TGGGTCCCTT	CGCATCTGCC	CTGCTGGTCC	CAGGATCCCC
1651	GGGCCGCCGC	TTCCCGGAGC	TGCCGGGTCT	TGGCAACTCC	GCTTTCCCTCC
1701	GGGGGCCCCC	GTGCCCTCTCT	CAAGCCTCCT	TTCCAGCCAA	CGACCAGCGG
1751	CCCCAGTCCG	GCTGCAGGTA	GCTGGGGAAG	GGACCAAGCT	GTGCCTTGGG
1801	AGCGAGCTTC	CCCGGGCGGG	GAGAGCGCAG	CAGATGCGGA	GCGGTCCAG
1851	AACAAAAGGC	TCATGGCTGG	CACGGGCCTC	CTTGGAGTGC	GGCGGGGACG
1901	TGGGTTCCGG	ACTCAGGCGA	GAGAGCCAGA	CGCGGGAGGA	AAAAAATGA
1951	AGTGAGAAAA	GAGAAGGAGG	GAGAGCTCAG	GGTGAGAGCG	TGAGAAAGAG
2001	GTGACCCGGA	GGCCGAGGTC	TGCGGCGGAG	CCGAGCGGCG	CCTTCCCTCCG
2051	CCTCTGTCAG	CGCCTTCCAG	GCAACCAAGC	GTGTCTCCGG	CTGCAACTCC
2101	AGCAAGCGCG	CCGTGCGCGC	CTCCACGCCC	GCCCGCCGGC	CGGCCGAGCC
2151	AGTAAGTAGC	GGCGCGCCCA	CCGCTCGTTC	CCCGCCCCCTC	CGCGGCTTCC
2201	CCGCCACCGC	CCACCGCCTC	CCGCGGCCCC	GCGGGCAAGT	CCGCGACCGC
2251	CTCCCGCTGC	CTCCGCGGCG	GTGCCGGGGG	CTCAGCGGCG	CTTCCAGCT
2301	GGGAGCTCG	GTCGCTGCT	CGCCCTGCTC	CCTCTTGCCG	GGGCGCGGCG
2351	TCTGGGGCGC	GCCGCGGGGA	GGGTGCGCCT	CGCCGCGGCG	TGCCCGGGCG
2401	CCGCGCCACC	CCTACATCCA	ATGGCTTTTCG	GGGAGCGGGA	AGTGGGGGGC
2451	GTCGCGGGGG	GCGAGGAGCC	GCGGCCGGGG	TGGGGCGTGT	GCGCTCAGCG
2501	CGGCCGAGCG	AGGCTGACGT	GCCCGCCCAA	GCGCGCGCCC	GGGAGTGTGT
2551	GTGCGGGTGT	GTGTGTGCGG	GAGTGTGTGC	GCACACGCCT	TGGGGGGCTG
2601	GAGTGACACT	GCAGTGGGCT	TCTCCGTAGC	CCCAGCCTTC	AGGCTGCGCA
2651	GCCCCAACC	TGCCGGCACC	GCTTTTGGGA	AGCAGCTTGG	CTCTTCCATC
2701	TCCCCAAGCC	TTCCTCTCCA	TCCTTTCATC	CACCCCTCGC	CGATCTTACT
2751	TTTTCTTTTA	CCCACGGGGC	CGCGGCCGGC	CACCCCTTGG	CCGGTGCAAA
2801	CACCAAGCC	CTCTCCAGTT	CTCCCCCAAG	CTAATATTTT	CCCACCTGTC
2851	TTTTTCTGGG	GTTCTCTCAC	GAGCCAGTCC	AAGGCTCCCC	CATCCTCGGA
2901	AATTGTTTTG	TGGACTGCT	AAACCGAGGC	GTGTAAAGCT	TGAGGACTTT
2951	ATTATTATTT	GGGTCTTTT	CATTTCTTCC	CCTTCTGGGC	AACGAAGCAA
3001	TGAAATTTCC	AATCGAGACG	CCAAGAAAAC	AGGTGAACTG	GGATCCTAAA
3051	GGTGGGTGTT	TCCTACTTTT	GGCTGCCCTC	GCCCTGCCTC	TGTCTCCGGC
3101	GTGTGCGCGC	TTCCTTGAGT	GGAAGCACTC	TTGCTTCTGG	CAGCGTGTGT

FIGURE 3, page 1 of 107

3151	CCTGAGGCTG	GGAAATGCGC	CTGGGAAC TG	CAGCGCGGGT	GGGAGGAGGG
3201	CGGAGGCAGC	GTGGGTTC CG	AACCCAGATA	GTGCCTGTCA	TTACCACATA
3251	ATCATTTGTC	CTCCTAGATT	GTCTCCAGAT	CTATTTAGAT	AGACCAAGCC
3301	GACTGTTTGG	TTTGAAATTG	CAAGTGTCGG	TATTTGCTTT	TGACTTTGAG
3351	TGTGCGAGTG	TGTGTGTGTG	TGTGTGTGTG	TGTCCTTTGT	TTCTGGTGAT
3401	CTTTGTCTCT	CTGGCAGATG	GGTGGGGTGC	TTCCCCCTGG	ACCTGGAGCT
3451	GCGCCGCATG	CCCGGGTGTC	CTCAGTGGGA	AAGGTTTCCT	GGCAGCAAGT
3501	GGGGCTCGAG	TTGCAGCAGC	CGTCCCTAGG	GGTGGGCCGT	TCTCGCAGGG
3551	CATGCAGAAT	AATGGAGCCC	ACAGGGCCTC	CTGAGTCTTC	GTTCAATCTT
3601	ATTACCAAAC	CTAGCAGCTA	GTTAGGCTCA	GGTCAGAGTA	GAAGCAGGAG
3651	GAGGGGTGGT	TTGTGAGAAG	GGTGGGGCTG	GCAAGGCATA	GGGGAGGGGC
3701	ACGAAGTGTG	CCCCCCCAAG	CAATGGTGTG	GTTTGCATGC	TTTTACGAAT
3751	GTTGGACCAG	GTTTCATCCA	CGCAAAAGGG	AGGGATTAAAG	ACGGATTTGT
3801	GTGTGCTTAG	GTCGCGCCAC	CGTGCTGTGA	ATTAGCATAC	AGATGTTAAG
3851	GCTCCAAGGG	AGTGATCAGT	ATGAGAGCAG	AACAAGTTGG	AACCGCGTGT
3901	CCAGTTGTGA	CAAGAATGCT	CTTTAGCATT	TCTTGTAGCT	CATCTGACGA
3951	CTGTGTGAGG	CTAGGCAACG	CCTCTGTGTG	TATTGGAATT	GAAATTTGTT
4001	TATTTGGGGT	GCGTGTGTGT	TTAATGTTCT	TTATGAGCGC	ATTTCTTCTT
4051	TTTCTCCAGA	CTGGAAAGAA	GAAACCATCT	TATTTGTTGA	GTAAATGTCT
4101	TAGGAATTGA	CTGGCTATTG	AAGAGTGAGT	GAAGAGATAC	TGCCTTTTTA
4151	AAACACTGAG	GCTGTTACAT	CTTAAATACA	GCCCAAACCT	TCTATTTTGT
4201	CTCTACTTGA	AATCTCTGGA	AATATGGAGG	TGTGCCTTTG	CTTTTTTGGG
4251	GGGAGAATCC	CTGAAAAGCA	TATTTGTTAA	ATACCTATTA	CATGCTAAAC
4301	ACTGTCTTAA	GCTCTGGAGA	TACAGTCAGA	ACAGGAAAGA	TAAAAGCTCT
4351	GACTTGGAGT	TTACAGTGAG	GGAGACAGAC	CTAAATCAAT	TCCATGGAGG
4401	AATGCATAAT	TCAAAGTTTA	TGTATGCTCC	AGGGAGAGCA	TCAGAGGTTT
4451	AAGAAAGTGT	CTGATAGAAG	AGATTGACAA	GGACCAGAGA	AGGCTTCCCT
4501	GAGGACATGA	CACCTGGACT	TAGGCCTGGA	GGATGTATAG	GAGTTAATTG
4551	TCTAAGGAGG	AGGGGAATTG	TGTCAGAAGA	GGGAACAGCA	AGTGCAAAGG
4601	GCCTGAGGCA	GAAGAGGTAT	GTGTATATGA	TGAAGTAAA	GGAGGTTCCC
4651	ATGGCTACGG	CAGAGTGAGT	GAAGAGGTAT	TGCCTTTTTT	AAACACCCAG
4701	GCTGTTATAC	TGTAATATACA	GCACAAACCT	TTCATTTTGT	CTCTATTTGA
4751	AACCTCTGGA	AATACGGAAG	TGTGCCTTGG	CTTTCTTTTG	GGAAATCCCT
4801	GAAAAATGTA	TTTATCCCTA	GCAGAGAGCA	AGAGGGCTTG	TGTTTTGAGA
4851	TATGACTGGG	GGATCCACAG	GCGAGACGCC	CCCCTCCAAG	CCCTGTGTTG
4901	TTGGAGGTGG	GGTAGCATTG	TGGGGTTGGA	AGAGTATAGT	ATTTATCTAA
4951	AGCCAATGAA	GAGTTTCAAG	ACGAGGAGTG	ACATGATTTG	AGCTAAGTTT
5001	CAAAACAAGT	GCTGTGTGGC	TCTTGTGGAT	GTAGGGGACC	AGATACAATG
5051	TGAGCATGGG	CCAGGGTGGT	TGCTGTGGGC	ATGGAGAAGC	GGACGGAGTA
5101	GAGAGCTGTA	GAGGACGTGA	AATCAACAGG	CTTTGCATGA	ATAATGTGTG
5151	GAAGTGAAGT	GAAGGAATTG	GAATGACTGA	GATGGCAGCC	AGGGCAGGAC
5201	CAGTCTTGAA	GGAAGACTCA	TGAGTTCAAT	CTAGGACTTG	TTGAGTAGGA
5251	CATGTCCCCA	AGCCATCCAA	GGGGTGTGTT	AGGTGGGCAG	CTGTCTAAGT
5301	GCTGGGGTCA	GGATCTTCAA	GGAACAGAGG	GAGTACCGTG	AGACTGATTT
5351	TGTGAAGCTG	GCTTTGTGTT	TTAAGGTACA	TTTCTGTGTG	ATCATCATTC
5401	TATATATTCA	TGTTACAGTG	ATGAACACAG	ACAAATTTTA	CACATTTTAC
5451	AGCCTGACAC	AGTGAAGAAA	AGCATACAAA	TAGCACCTTC	AGTTACAACC
5501	AGTGGTGCTA	AAAATGAAAA	AAACCTCAAT	AAAAATAACA	ACATTTAATG
5551	AGCAACCATT	GCATGCCAGG	TGCTTTATGT	ACATTGTTTC	ATACAATTAT
5601	TTTCACAATA	CTTATCTGAT	GGTATAAGTG	TTATAGTTCC	ATTTGGCACT
5651	TGATTGCCAT	CATGACACCA	CTAATCTGCC	TTCCAGTGGA	GTTGCTCTGA
5701	CTTTGTGCAC	AGTTATTCCC	AAAGGTAGGG	GTGACAGTAG	TCTTTTCTA
5751	GCCAGGGGAT	GGAGAGGGGA	AGAGAGTGAG	GAGTGAGGTG	GCATATCTCT
5801	TATCTGTATA	GAATTATGTG	CTAGGTGCTC	TTCTAATGTT	TTACATGTGT
5851	TAATTTAATC	TTCACAAACA	TTTTAGGAGA	AAGGTATTAT	CCTAATTTTA
5901	CAGATGAGTT	AACTGAGGAA	CAGAGAGTTT	GAGTAACTTG	CCCAAGGTTG
5951	CACAGCTAGT	AGGACAAGAT	TAGAATCTGG	GCTCTTAAAC	ACTCTTCAAG
6001	TCTGTGTTTC	TTATTGGGAC	TTTTGGCTTT	TGCCTGGTAA	GGTCCCAAAA
6051	GCTCAGGAAG	TGGAGAAGCT	TGTTGCGAGG	AGGAAAAGGA	GAAGAGAGAG
6101	GATGAAGAGG	AAAAGGGAAT	GGAATAGGAG	GAGGATAAAA	GAGAGGAAGA
6151	GAGAGGAGGA	AGGAGAAGAG	GAGACAGTGG	CTCAAGCTTA	CCCTACTTGT
6201	TCCTTTCTCT	ACTAACCTAT	TCAGACAATA	ATCTTTTCAT	TTCCATGTCT
6251	GATGGGCAAG	TCAGTGACTA	CTGGACAGAG	TTTGGGTCTC	TGTTTTGGAG

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6301	GTTCTGGATT	ACACAGACCA	AATGTGTTTA	GCAGGGAAAA	GATGAAGGGG
6351	AGCCCAGCAG	TATTAGGGGA	AAGTGGAGAG	ACAGTTCACA	TTACTTGGAC
6401	TGTAGGATAT	GTCTATCAAC	AGACATGACC	CTTCAGGCGG	AGGTGCTCTC
6451	ATGGGTCTCTG	GAAGGCAGTT	GTAATTATAA	TGTTTTTCTT	ACAGCCTTAT
6501	TACCCACAA	TTTAATAGCA	AAAAATGAAG	GTGGTTTGAG	AATAGATTGG
6551	TTTGGATAGC	ATTTGGGTGG	ATTAAGCAAA	GCATTGTCAA	GAGGTGTAGG
6601	TAAAAACAAG	ACCCAAATAT	AAAATGGTTC	ATCTCTGGTG	AGCTATGGCC
6651	TTCCCTTCATA	TTCATGGAAC	AGAGACTTCT	ACGAAGAGCG	TTACTGTTTG
6701	TGTAGGACCT	ACCACAAGTA	GATTGGTTCT	AAGTCTTAGC	TTTCATAGCA
6751	GAATTACGT	GCACTTTAAA	TCATCAGCAT	CATTTGTTGA	TGATTTTCTG
6801	CTTAAATTTG	GTATTTACTT	GCTGCTTATG	TGTATTAAGA	TCTTTTAAA
6851	ACCAGTGAGA	TCTGCAAATA	GTATTCCTCT	CACTAGAGGC	AAGCAGATGA
6901	ATACAGTGTA	AAAAAACTTT	GGATTTGGGG	GCAAAATAAT	TAGGTTCTAA
6951	AAGCAGCTGT	AGCAATACTT	AGTGGTATGA	CTTTGGGCTG	CTCATTTAGC
7001	TTTTCTGGGT	TTGCTTCCC	TTCCATGGAG	AAAGGAGTCA	TTGCCTTTGT
7051	CTACCTCTCT	GACTTTGTCT	CTTCAACTTT	CCCCATCTTG	ATCTGATCTT
7101	GGGGCCAGTT	GGCTTCTTT	CATTCTCTCA	ATAGATCACA	CTTGCATCTG
7151	TCTGAGGGCC	TTTGCGCTTG	GAATTTCCAC	TGCTTATAAT	GCATTTACAG
7201	TAGTTGGCTC	CTTTCTGTCA	TTTGAATCTC	AGCTCAGATG	TCCTCTTGTT
7251	AGCAAGGGAT	TCCCTGTCTT	ATCTGAAAGA	CCTCTCTCTC	TGTTCCCCAG
7301	CACCATCATT	TTCTCTTGTTG	TCACCTATTC	GATTGTCTTA	CTGGCATTGT
7351	TCATGATTTG	AAACCATCTC	ACTTACTCAT	GGGTGACATT	TGATGCCAGC
7401	CTCCTTTACT	AGCATATGAG	GTGCATGAGC	AGGGACTTTC	TCTGTCTTGT
7451	TTATTGCCAT	AACCCAGTG	CCCTGGAAAG	TGCCTGGCAC	TCAATAACCC
7501	TTTGCTGAAT	GAATGGAAGG	TTGGCAGGAT	GGACTGGAGA	GGACTGAAGG
7551	CTTTATGCCT	CATGGAATTT	GCAGGACGCC	TCTCAGCTAT	AAATGGCAAA
7601	GTACAAATAA	GGAGAAAGGA	AGAATATCCC	CAAATAGTGG	CATATCAGAA
7651	AGGACGCTGA	TATTCCCAC	TCCTTGCAAG	CTCCAGCTCG	CTCTAAACCT
7701	CCAGTGCGCT	GTTTTCTTTC	TTTTCTCGTC	TTTGACCAGA	AGTAAGAAGG
7751	CTGAATAGAA	GTGCAGTGAG	GGTGGATGGG	TGGACTGATC	TAGCCTGCTG
7801	AAGATATGGT	CAGTGTCCAA	TAAATAATTT	GGCTCATATT	AGCTATTGGA
7851	GTGTGGCTAT	TTTTAGGCAC	TTAATCCAC	TTAAGAAAGA	AGCAAAGCTC
7901	TAGGAGTGGA	GGTGGATTTT	TTTTTAAATG	CTACACTTTT	AGTGCACACT
7951	TTAATGCAAA	ATTCTGGAGA	AGCCCATACC	TTATGTGCAT	AGCACCTTTC
8001	AGTTTACAGA	ACACTTTTTA	GGAATGATCT	CATTTGTACT	TTAAAAAACC
8051	CTATTTTTGT	AGGGATTAGA	GTCTTAGATT	TACTGACAAA	TAAAGCAAGA
8101	TGTAGAAAGG	ATAAATGATT	TATGTGGGAG	CCCAAAGCAA	CAAACAGGCA
8151	GAGCTGGGGC	TACCCTAGGC	CTTTTGATGC	TTACGTCCAT	GACAGTTTCC
8201	TTCAAGCTTT	CCTTCCTCCC	AGCGACTTTG	TTCATTCCAC	ACTCTCCTGC
8251	TCTTTGTTAC	CCAAAAGTGT	GTTCAAAGGT	TTCTCTGAGA	GATTTAGAGG
8301	AAGCAGTCTC	CCTGTTGATC	AGTGAATCTT	TAGTTGATGG	CTATTTTCAG
8351	CAGGTGTGTC	TTATTGTACA	GGTCTACACT	TTCATTCTAT	GAGCTCAGGT
8401	GAAGACCCTT	AGATCTTCCT	TCTGCTGTAC	TGGCTAAAAG	AAGATTTTGG
8451	TCTTTTGTGA	ATGGGGGCCA	TTTTCAACTT	GCTAGGTTGC	TTAAGTGCTA
8501	GCTTTATTAA	CGTGTTTCCA	AACACACATT	TGTGGAGCTT	AGATTTCTCTG
8551	GAAAGAAAAT	AATCTATTTT	TGATTTAATA	TCCAATTTTC	AGGAGATCAG
8601	TGTTCCAAAT	GGGATTTAAA	ATGTGCCAAA	ATCACCACAA	TTATCCTCAA
8651	AAGTACCAAG	GAACAGTGTT	CCAAAGACTG	TCTTGGCCAA	GATTTGGTTC
8701	AGGCTTCTTT	TCCAGCAGTG	TCTAAGGAGC	TTCACCATCC	TTTTTGCTAA
8751	TCCCAGTGAT	CACTGGGTTG	AATTAAGACT	GAGCAGGTG	ACTTTGCTGT
8801	TCCACACCAT	TTCCAAAACA	TCTGTACTTT	GGCTCCATAT	GAACCCACC
8851	TTAAATCTGA	TGCATTTAAA	AAATATAATA	TAGTCTTTCC	CCTCATTAGG
8901	AAACTTCAAC	CACAACTGAG	ATATGGTGTG	AAGTATATTT	AATATAGGCA
8951	CAGTGAGCTA	GTGATTTCTT	TTTGACTTTT	AGTCTACAGG	AAATTAGAGG
9001	AAGAGTTTAA	TGATAAAATG	GAAAGAAGCC	ATTCTACTGA	TAGCCAGTTA
9051	GGAAAGTTCA	GTTTGGACAG	CTCCCTTGGC	TGATGCAGAA	AGGTGGATAA
9101	AAATGACAAT	CTTTTTCTGT	ACTCTGATTC	TTATAAAGGG	CACCTACTGG
9151	ATGATCCAGA	TGAGGTTAGA	GTGAGTTAGG	GGCTTAGCTC	TACATGGCAT
9201	GTTTACAGAA	TCTACCTAAC	CGTGGCACTA	GGAGTGTGGT	CACCTGTTTG
9251	GTTCCACCCA	CCTGGGTGAT	TTCTCTCCAT	AAGAATCATG	GAGGTCAAAG
9301	GGACCTTCCA	CTTCTGGGGT	CTGGTCCTAG	GGGTACTCTC	AGCGGAGACT
9351	TTACAGTTTA	TCTATGTCTG	GCTCATTACC	ATCACCTACA	ATGGGGAAAT
9401	AAAGACCTCA	TATTTACTTG	CTAGAACATC	TATTTGTCAT	TTGCAGCCAC

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9451 AGTTTAAGAG TTTTTTTTTT CTCCCTGTGA GTGTCTAGGA CTGAGTACTC
9501 TGAATTGAAA ATGAAACCTG ACTTCCTAAT CCTCCATTTA GGGTTGAAGG
9551 GAGGGAGTAA GGGTCATAAT CACTGGCAGG GGAGGGCAGC GTCATGAGGG
9601 AGCATTGCAT TCTTTTCCTT TGCCATTCCC AGAGCCAGGG AGATGGGGAG
9651 GGGTGGGCAT TGGAGGTAGT GGGGATGAGG CTGGGAGATG GATGGGATTT
9701 CAGGAGATTT TAGGTTTTGT ATTACCAATA ACTGCTAGTC TCATCACTTA
9751 CCCTTTCCAT GGAAGTAACT TTGAAGCAGA GTGGAATGGT GGGGAAACAA
9801 GATTAGAAAAG GAAAACATAG GATTTACTGC CATACATAAG CCAGGTGATC
9851 ACAGGGAAC TTTCTTCAT TCCTCCCGTC CTTCTTTTCT TCATTCCCTT
9901 GTTCCCTCCC CACCGCCATC CCCCCAAATC CTGCAGAGTC TTGATCTCAA
9951 TTGCTCTCGC TTGTGCAAAG GGTCCCTTCT CCCTTACTCA ACTACCCAGT
10001 GTGGTGGGGC TGGTGGTATT TACAGTTTAA AAAGAGTTGC TTGAATAGAA
10051 AATGAAAATT TGGTCGGGTG ATGGAGAGCC TGGAAGTCAC GGTAACTTTT
10101 GCAGACGCCT AAAACACCAA TATTCATAAT TTTGACATGC AAGCTAGCAA
10151 CAATTTTACT ACCAAGAAAA TGAGTTTCTT ATGTGCAAGC AGAACTCGAG
10201 ATCCCCTAAA TAATCACACA CCAAATATTT AGCATGATAA AGATAAATAG
10251 TATAGCTTAC TAAATTTAAT GTGATATGAG CCTGACAGGC AGAATAGAGA
10301 TGCTTGATAT TAGGTGTGAT AAAAGGTTTG ACATCCAACA TTCACTTACT
10351 TCGTCCTCTG AGACAAAAGT CAGGCACCAA GTGTTTAAGA AAAATTGATG
10401 GGAGGAAAAG CTTAGAGATG AATAAAGTCT ATTTATTAAT TTATATTTTC
10451 CTCTGAGAAC TGGGAGGTGT TGTTACCCAT GTTAACGTGT GACTAACCTG
10501 GGCCAGCTCC TGGATTCTAC TGGCTAAGAA TGTGCTTTA GGCCAAAGGA
10551 ATTTATCCCT CATGGTGGAA TTTGAGGCCA TATGGGAGGT GATTATGATA
10601 GATCTGTTTT GCCTCTACA TTCTTACAAT AACCTGAAAG GAGATTAAAT
10651 ACATGTTATA GTCATTTAAT CTAGACTCCA GGCAAATGT CACCCCTCTGT
10701 ACAGTATAGG AGCTTAGGAT AGGAGACCTG GTTCTAGGG CTGGCGCTGC
10751 CACTCATTTA GAAAAGGAGG GAGTTGAGTT GTTGGTTGTT GAGATCCCTT
10801 CCTTCCCTGA TAGTCTTAGA TTGCCTGAGT CCTAATCCAA GCATGATTTA
10851 CTAGAGGCTG ATTTGGGAAC ATTGCTTCAT TTTTCTGTGA CTTGGTATCT
10901 TCATCTGCAA GATAGGGATA ATTACAGCCA TTAATTCTTT GGTTTGTTAT
10951 GTGGATTACA TAAAGTGATA CATGCAAAGC TCTTAGAAGA ATGCCGGATC
11001 ATCATGAAGG CTCCATGAGT GGTACCTGCC TTGTGCTGTT CTCACAGTTG
11051 CAGGAGGCAG CCTGTGAAGT CAGGCTAGCC TCCAGCTCAG CCTCTTGGA
11101 GCATCTGTTT CACTGTCTGG ATCATCCAGG AAGTGGTCCA TAGCAGAGCA
11151 CAACCTCTCT GATACTCTGG AAGACTCTTA GTATTCTTAG TTCAGATGTA
11201 AACAACTAG GCTGTCTCTG TTAACCTAGA GAAAAGACCA GTGAAAGAAC
11251 ATGGCTTGGA ATCACAATAT TTGAGTCTGA GTTAATGTAC CCATTTTATT
11301 AGCAGTGTAT CATAGTTGAT TTCGGCTGCT TTAATAAAAT TCCATAAACT
11351 AGATAGATTA TAGACAACAG AAATTTATTT CTCACTGTTT TGGAGGCTGG
11401 GAGGTCCAAG ATCAAGGCAC TGGTAGATTT GGCATCTGGT GAGGGCCAC
11451 TTTTCAGCTC ATAGATGGTG CCTTCTTGCT GTGTCCTTAC ACGGTAGAAA
11501 AAGTGATGGG TCTTCTTGG GCTTCTTTGA TAACTGCACG AATCCTAATC
11551 ATGAAGGCTC CATGCCATG ACCTAATTAC CTTCCAAAGG CCCCATCTCC
11601 TAATAACATT ACCTTTGGGG TTAGGATTTT AACATATGAA TTCTGGGGGG
11651 ACACATTCAG ACCATAACAC TGTGTGAAC TGGCCAAGTC ACCTAACCTT
11701 TCCTAGCATT AGTTTTCTTT TGGGTAAAAT AAAGATCACA ATAACAACCA
11751 CTTACAGTTT CACTGATGA TCAAATGAGA CAAATGTGAA TAAACTTCAT
11801 AAAGTGTAA ATTCCAGACC AACATTTCCC AAAATGTGTT CTGTGAGACA
11851 TAAGCTAGAC TCATCAGATA CTCTGAGAAG AAAAGTGGTG TCATGGTAAA
11901 GTCAGTTTGC AGGATGATAC GTGCTCAGTC ATTCTTAGAG AGTCATCATG
11951 CACGTTAGCA TGTTACTGTA TTATTGTGTA ACAAATAACC CCAACATTTA
12001 GTGGCTTAAA TCAATATAAA CATTTATTAT CTCATAAGTT CTGTGGATCA
12051 ATAATTCAGG GATAGTTTAA TTGGGTGGTC TGAAGTAGG TCTGTGATG
12101 ATTGTGGTCA GATGTTGTCC GGGCTGCTGT CATCTGATGG CTTGACTGGG
12151 GCAGGAGGAT CTGTTTCCAA GATGGTGTGC TCATGTGGCT TGCAAATTGC
12201 TGCTGGTTGT TGGGAGAGG GCTCATTTCC TGCCAATGTG GGCCTGTCCA
12251 TGGGATGCTT ATGTGTACTC ATATGTGACA TGGTGGCTGG CTTCCCAAG
12301 AACAAAGTAT TCAAGAGAGA ACAAGGTGGA ATTGGCAACA CTTTTTATGA
12351 CTTAACTTCA AAAATCACAT ATTGTTACCA CCACCACGTT CTTTTCATTA
12401 GACGCCAGTC ACTAAAGTTA GTCCACATCT GGGGAGTGGT GGGGGTGATC
12451 ACATTCACGT TGAAGGGAG ACATGTCAA GAATTTGAAG ACATATTGAA
12501 AAATCACCGT AAGAAATTTT TCCTATCATT TATTGAATAG GCACCACGTG
12551 CTAGGCTAAA TGCTTTGTAG TTATTATCTC ATATAATCCT ATTCATAATC

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12601 CAAAGAAATA GGTGAAATTA TTATCTCTGC TTTCTGAATG AGGAGGCTGA  
12651 GGCCTATAGA GCTTAAGTAA CTTGCCCAAA GTTACCTAGT CATGCTACGA  
12701 CTTGAACCCG AGTCTGTCTG ATTTAAAGCC TGAACCTCTTA CCTCTGCCTC  
12751 ATATGCCTCT CTCTGATAAT CCTGTAGTTC AGAAGTCTGT TTAATTTTGT  
12801 TTAAGCCTGC ATTTTCTACT TAACCACAGA ATGATGATTC ATTTAACTCC  
12851 ATTTTACCC TTTCATTTAC CAACGGCTTG AAACATTATT CTAGAAAGAC  
12901 AGTGAGCATG ATGATGATTT ATGTATAATA TGAACATATG GTCTCATAAT  
12951 AGATCCCAGC ATACCTATCA GTCCAAACTT TTTGTATTAT TCAAATACTG  
13001 GAAGTGTCTA TTTTGCCTGT CTTGTGTGGG CACCATCTAT GTGTAAATCT  
13051 GTAAACATTA ATTTAAAAA AAGACCCCAT AATCCACCCT ATTTTCTCTG  
13101 ACTGTGAAAC TAGAGGTGGG GTGTGATAAC TCATGGTCCC ACTTCTCTTA  
13151 CAGAGTCCCT TTCTTTGCAA TGTCCCTTCT TTTACAGATT CAGTGACTGA  
13201 CAACTTAACT TTCTTGGGTA AAGCCAGAAA AAACAGGATG GCCTCCAGGC  
13251 CGAGCAGTAG AAATGCTGGG GAATGGGGTG TCTGGTGTGT GTCTGGTGTG  
13301 TTCTTGCAGT GCCTGCAGGC CATGTGTCTG TATGGTGACT GAAACGCAAG  
13351 TCGGCATCCA GCCAGGATGG CAGGGACCGT GTGCCTGGGG GTGACGGCAA  
13401 ACACACAGTG AGAAGCTGCT GATGGAGGGA GGACCGTAG CACTCCTTGT  
13451 CATATTTTGA GTAAACATTT TTTTACAATC TTGTTGCTTT TTCTGTACAG  
13501 TCCTTGAGAAA ATGATTTCCA GGAAGCAGGA TGCATCCAAT GACTTAGAGG  
13551 TTCCCATGTT TCCAAACATT ACATGCCTGG CTTATTCCTG AGGCAGTTTT  
13601 GTATTCTGAA GGAAGTTTTG GAGCTTCTGT GTTCTGGGCA GAGGCGAGTG  
13651 AATATGGTTT CTTTGTAGTA GCACCGTGGG CTTGAGAATG ATCAGGAGCT  
13701 GGACATTGTT GAATATGTCA CTTACTGCAC AAAATGGCAA AGACAGGGTC  
13751 TGGGACAGGG TGAGAGTGTG TTGAATGGAG ATGCCTGGGG CCCCAGTCAC  
13801 ATTCCAGGAG CAGCACTGAT GGCATCTGTA ACCATAGTAA CCAAGAGTGG  
13851 AAAAAGTCTC AGGATGCCAA GACGCCACTG TGCCCCCTT CTGGTTCTGT  
13901 TGTTTTCCCC TCTATTCTTT CATCCAGAAA TCCCCCATC CCTGCCCCCA  
13951 ACCACCCTGA CAAGGGA CTCTTCAGGG TGGTTTCTAC ACTGGTGATT  
14001 TTAACCTTCT ACTAACTCAA CACTTCCTGT AGCCCCTTTT TCAGTTCTGA  
14051 GATCCACAAG GATTTCATTAT GATCCAGACT AAGCCTCATG CACCTAATTT  
14101 CTTCCGCTTT TCCATTTTTA CTGTGAAAAT TGGTCCTAAG TCCTGTAGTA  
14151 TACATACTCT AGACTTATTT ACAGCTGGGC ATAACAACGG TGGCTCATGG  
14201 CACTCAAAGT TTCCAGTAAC ACTCCTGCAC TCACAGTCTG GTATAGATCA  
14251 TGAGATTTTT TTAGATGTGT TTTAAATGAA CAGAGAAAGG CAATGAGGCA  
14301 CAGGAAAAGAG AGCCGTGTGC TCTTGTGTTG AGATGTGGGT TTTGCTACTG  
14351 GTTGGAAAGT GAGGTGTGGC ATGGCGCATG AGGGTGGGGA GAGGTGGGTG  
14401 ATGCTCAGGT CATGTAGGGC ATAGTAGGTC TTACTTACTA AGGAACTCTT  
14451 TTTTCTGAG AATAACAGGA ATGTCTTGAT TGATTTGAAG TGGGAGGATG  
14501 ACACAATCAG ATTTTTAAAA GATTATTTAA ATCGCTAATA AATCAAATGA  
14551 TGGGTTTCCAG GAATGTTTGC AGAGGATACT TACTGTGTGA CAGGCATAGT  
14601 GCTGGCCTTA CCTGGGGTAT CTGTGTATTC TTGTAGGAAT CCTACATAAA  
14651 AGCTGTTAAA ATATTTTAAAC AGAAAAAGC TTTTCTTGAC ATCTTTGAAT  
14701 TATGACAACC AATTCCAAAC TTCTGGTTGC AAATGGGAGG TGATCTTAA  
14751 AGCAATGGCG ATTGCATTTT CAATTTCTGT TCATTAAAAAT GATATTTTCC  
14801 CTGGCTTTGT TACATGACCC TTGATTCTGT GATAATTTGC ATATCTAGAG  
14851 TCGATGAATC AATACATGCA AAACGTGGT GCGCTCGCTC ATATTCTGTT  
14901 ATACTTCAGA CGCCTTTTGG AAGCATGTGG CTCTCAGTTC AGCATAATGC  
14951 TCCTGATAAA ATTGCCCCCT CCATACCCGC CGTCACTTTG TTCTGGTGT  
15001 GTCCAGAGGT ATTGTAACAT TGGGGTATTT CTCCTTTGAC TCTAATGGGA  
15051 CCCCCTGCTA GTTGTGTTCT TGTGGCCTCA GCTTGAAGG CCTCCCAAAA  
15101 GCCTGAATTA ATGAAAGCTT CTGATGTGCC GATCCCTTTC TCTGGCAGGG  
15151 TGAGAACGCA GTTCTATAG GAGCGTGAAT GCCTGCTGCT CAGGCAATAA  
15201 TCTCTGCATT CAGCCTCAGT ACTAAAGACA GGCAGAGCAG ACAGCCACAG  
15251 GGGGTGGGAT TTGAGGAGCC CTATAAAGTC CCTCTCCACA GCTGACACAC  
15301 ACCACTCCTT CCCATGACTA TCAGGATGCC TACAATCTTA ACAGTTACTT  
15351 TATTCAATTGG CTGTTGTCAC TCATCCATCT GGTTATTCCA TAAACACTTA  
15401 GCGAGTGAGT GCCTGCAGAA ATGGGGCTAG GCATTGGACA CAGAAAGATG  
15451 AAAAAGACCT GAGGCGTGTA CCCAGAGAAG TCACAGCCTA GCCACTGAGA  
15501 ACAGGTGCAT CATCAAGTAA TTATGATATA CCATGATAAA TGCATATCAT  
15551 TTATATGGTA TATGATATAC CATATGATAT GGGATATGAT ATACCATATG  
15601 ATATGGTATA TCATATACCA TATGATATGG TATATGAGAG AGATATGGAT  
15651 TAAAACATCA GCTCCAGAAC ACATCTTGTT AACATGCGAA TGTAGTTCCT  
15701 CAGGGTAACA AACTAATTTT CAATTACCCG TGGGTACAGC CAAATTAATA

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15751 GTTCCTATGA GAGAACTGGA CCAAGCAGAG AACAGCAACT AGGGACTGAT  
15801 ATGTATTGAT AGGCTGGTGT CAAGTGGGAA GGGGGGAAGT CAGGTGCTGT  
15851 GTAGGGAGCA GACTGAGAGC TCTGGAGGGC AGGAGTGCCA GGAAGGTCAC  
15901 TGAAAGCAAC TTTTCATTTG TGCAAATGTT GTCAGAGGTT GCTCTGCTCA  
15951 TGTTAAACTC ACTTTATAAA GTGGAAGGAA CTTTTAAGAT ATCCAAGTCC  
16001 ATTGAGGCTT CTTAGGGCAA TACTGAATCT AGATTGGTGA AGTGACTTGT  
16051 GCTTGCCCCAG ACAGCAAAAA GAGGACAAAG CATATCTATG AACCCGTAAT  
16101 GCTAACCTTC ATTATTCAAC AGTGATGCTT ATGGCAATGC CAACGGGTGT  
16151 TGGGGCCTTT TATTAATTTT TAATTTTAGT TTTTATGTT TTTGAGACAA  
16201 GATCTTGATT TGTCGCCCCG GCTGGAGTGC AGCGGTGCAA TCACAGCTCA  
16251 CTGCAGCCTC GATCTCCTGG GCTCAATCAA TCCTCCCACC TCAGCCTCCT  
16301 GAGTAGCTGG GACTATAGGC ATGTGCCCCC AGACTTGGCA AATTTATGCA  
16351 TTTTTTGTAG AGACAGGATT TTGCCATGTT GCCCAGGCTG GTCTCGAACT  
16401 CCTGAGCTCA AGCAATCCGC CTACCTTGGC TTTCCAAAGT GCTGGAATTA  
16451 CTGGTGTGAG CCACCGTGCC CTGCCTGCTT GAGCCTTTTT GCTATTCTCC  
16501 CTCCTATGGG AAAAAGAATC GAGAAAGAGC AGTAGGCTCT ACTAGAGTCT  
16551 GGAGCATATC GGTTCTGAGA TTTCAAGATTA AATTCTCTAT GTCTGCAGCA  
16601 AGTACAAATG TGAGTGTATA TTCAGCCTCT TGAAGAAGAC ATCTATCCAT  
16651 TTCTTCAGTG AATATTTGCC CGGAGTCTTC TTCGTGACAG GCACTGTTGT  
16701 AGGCCCTGGA GGTACAGCAA TAAACAAGAC GAAGTCTCTG CCTCCTGAA  
16751 ACTAACCGTT TAGCCAAGGC TTAGCATCTC TCACACTCAG GTCAACTTCT  
16801 GCATTTTAGA AATCTGTTTC AGGCACGCAT TTGACAAGTA AAGAGGTTCC  
16851 AAAAATACAT TAATAAGGAT GAAAATGAGG CCATTCTGAT ATTCCATTGC  
16901 TTGGCAAAAA TGCTTAATAT GGGAAATTTAA TATGGAATGG GTGCTGATGC  
16951 TGTCAAAGGT GGTGACATTC TGTTAGAAAA TTCAGTGATT TCAAAGAAGG  
17001 CCTCAGAGCT GCCTAGTTTG TAATTAGATA TTTTGAAGAA TCTGTGTTAA  
17051 TTAGGACTCT GTGGCTTGTG CATGTATACT GGGACGAGAC TGGAGTTTGT  
17101 GTCTCTCCCA TGATGATGGC ATGTAAATTA ATCTCCAAGG AATTGCAAGA  
17151 TGCTGAAATG TGAGGTACTT GAGTACACGT TGCATGAGTG CACACAAGTG  
17201 TGCCTGTGCC GGGATGCGTG TGCACGCGTG CACACACATA CACTCTAGCA  
17251 GATAGTAACT TTTTGCTACA CGTGATTTC AAAGTGTCTA AATTTACATG  
17301 TCTTTTGAGT AGGAGGAAAT TAGGACTTTT GTCTGTTATA TGCTTGCAG  
17351 TCTCTTGCC TTCTCTGGGC TGCTGGGGCA GAATGAGGCC AACAGAGAAC  
17401 CACGGATGCC AGTCTGGGT ACAAGGGCTT AAGGAAGCAG CAGATGGTTG  
17451 GACTGACTGG GGTGTCCATT AAGAATCCAG GGGTAGTGAG AGTCTTACCT  
17501 GGAGTTTGAG GCCGCACTTC CATTGCCAGG ACTCTCAGCT GAGTGGCTGG  
17551 AAGAGACCTG TAGGAGCCAT CCTTCCAGTA TCTATCAGAG GTTTCTGCAC  
17601 TGTTTTAAGC TCGTCCTAGT GATCGAGGGA ACCTTGACTG GGGGTGCTGA  
17651 TGATTATTAA CAGTGGCCAT ACTCCCACGG CTGCAGGTGG AGATGAAGTG  
17701 TTTGATGAGA AGATGAGCAA GAGCTCAGGT GTGCCCCACC AGCTCTGCCA  
17751 CTCCCAAGCT GCCGAACCTA GGCCTAAGT TACCTCTCTG TGTCTGCTTC  
17801 CCAACTTGAG AACCAGAAAT GATAAAAGTA CCTGCTCCCT AGGGAGTAGG  
17851 TATGGTTAAA TGAGACCTCT TAAATGAGAC CATGCACACG AAGAGCAGAG  
17901 CACAGTGCCT GGCACACAGG AGGCACCTAA TAAACATCAA TGATGCTGCT  
17951 GCTGGTAACA CCCATTTGCT GAGGGTCTTC AGTGGCTCAG GCACAGTACT  
18001 CAGTGCTTAA CATATAATAT GTAATTTATT CTTACAGTA GCCTGAGTCA  
18051 CTTGCTTGTT CTTCTGGTTA ATATCCTAAT GTTTAGCTCA CCAACTTAGA  
18101 TGCTCATGAC TTCCAAAGGA TCTTCATGTA ACAAGGACTC CATATCTATT  
18151 TTTAAAAAAT AAGAGCTTTA TTAAGATATA ATTTACATAC CATAAAATTA  
18201 CCTATTTAAA ATGTACAATT CAGTGGTTTT TAGTATATTC ACAGAGTTGT  
18251 GCAATCATCA TCACTATCTA ATTGTAGAAA ATTTTCATGA CTCCAAAAAG  
18301 AAACCTCCATA TCCATTAGCA GTCACCTCCC ATTTTATCTC TCCCAGTCCC  
18351 TGGCAAGCAT GAATTTACTT TCTGTCTCTA TGGAGTTGCC TATTTTGGGC  
18401 ATTTTCATGTA AATGGCATCA TACAACAGGT AGATATTTGT GTGTGTGTGT  
18451 GTGTGTGTGT GTGTGTGTGT GTGATCAGCT TCTTTCACGT AACATAATGC  
18501 TTTCAAGGGT TCACTCATGT GGCATCCATA CCTATTTTGA ATGAAGAATG  
18551 AAGACAGTCA TCTGAGACAG TTGTATTAGT CCATTTGGAA GATGAGGAAA  
18601 CTGAGGCTGA GAGTGTGTAT GTAATTTGCT CATGGCCACC CATCTTGAAA  
18651 GCGCTTGAGC TGGGATTTGT GCTCAGGTCC ATCTTGCTC CAAGGCAAGA  
18701 CCTTGGCCTT TGCATCCACT CACTGGTCTC TGGTTGGACC TCTGCATCAT  
18751 GCTGAACACC ATTTCTATAG AGATGGGTGT GTCCCACTGG GTGTGGACAT  
18801 CCTGAGGAAT TGCTGTGGTT GCAAGAACTC TGATATTTTC CATCTACCTT  
18851 GAGGGGGATA TGGTTTCATG TCTGTATACT CACATAGTGT TGACCAGTCT

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18901 18951 19001 19051 19101 19151 19201 19251 19301 19351 19401 19451 19501 19551 19601 19651 19701 19751 19801 19851 19901 19951 20001 20051 20101 20151 20201 20251 20301 20351 20401 20451 20501 20551 20601 20651 20701 20751 20801 20851 20901 20951 21001 21051 21101 21151 21201 21251 21301 21351 21401 21451 21501 21551 21601 21651 21701 21751 21801 21851 21901 21951 22001

18901	AATTCTTTTG	TCCATTTTCCT	AAGGGTTATG	ATATGAACTT	GGAAAGTTAC
18951	AGAAATGAAA	GTGATAGGAG	AGATATACTT	TCTGGGTTGG	AAACCCAGCA
19001	ACCACTCACT	CAATATGATG	GAGGAAATGT	CATCCTTCTT	GTGTTGTCTT
19051	CAATAATAGA	TTGTAATGAA	ACACTATGGT	GTCTTAGTTG	GCTCCCTCC
19101	TGCCCCGTGC	CCCTCCCCC	AGCCCCAGTG	CTTTTCTGGA	GACATGAGAT
19151	GGTGTATCCC	TTCTCAGTT	GCTGTGATAG	CAGTGGGGAT	GATGGGGACA
19201	GGTATTCATG	GAAGGAAAAG	GCATGGTACC	AGCAGGCTCT	TGGGCAGGGA
19251	TGTGTGTCTT	CACTTGATCA	TCAGGGAATG	AGCTATCATG	ATGACAGAGC
19301	ACATCCTATG	AAGTACAAAT	CTTCCCCCAC	ATTTCCCCAA	AATTACTTTT
19351	GTCCTGCTCT	GTTCTCTCAC	ATGCTATTCT	AGGGAAAAGG	TCCCATTTTA
19401	TCATTAAAAT	GCAAATGAGA	TTTCCATCTT	GCTTCTACCA	AAGAAGGAGG
19451	AAAATAACCT	ATATAAACAC	CATGAAACCT	TACTTTGACT	TAAAACTAGT
19501	GGAAATTGGC	CCCTGAATCA	GATAATTAGC	TGAAAGTACA	TGAACAATTT
19551	AGGCCTCCGG	TAGTGGTTAT	GTGCTTGTTG	TATAGGAATT	TCGTCTACCA
19601	TGGATTTCAT	GGAAGTGGCC	CCATTCTGTC	TCTGGGTTTA	TGTAAGACTT
19651	TCAGCAGCAG	CCCAGTCTGA	TGTAGCAGAT	GTTCCAGTGC	CTGTCCCTAT
19701	CCTCCTGCTC	GCACCACTTC	AGCTCATGCT	GGCTCACTTC	TGACTGCCAA
19751	CTTGGCATTT	TTTTTGCCCT	TTTCTTGACT	GAGCCTACTT	TGCTGCTCCC
19801	ATGGAAGGCA	GGAAGTGTTG	GGGAATTAGT	GGACCCAGG	AGGAGCCCTC
19851	AACCAATAAC	TGATGGAAGA	TGGTGCCTAA	ACACCCCAAT	TCCCTCAGCC
19901	TTGGGTAGGG	TAACCTCAGG	ATATGTTTAA	CATGGGGTCC	CAGTTTCCTC
19951	TGTAGGAAAA	ATTCCACTGG	GCGACAGCAG	TAGCTAGTTA	GAAACTTCAC
20001	CTTTTATTGG	TTTTCTTGGC	TGCCTTCCCA	GCCCTTTCTC	TTTTCTCTAA
20051	TTCCCTACTG	GCGATTTCTT	CACTTCCCAA	ACAAACCACT	TGTGCTCAAA
20101	TCGTAATTGT	AGGATCAGCT	TCTGGGAAAA	CCCAAATGAA	GACATATGGT
20151	AAAGCTTCCC	TCTTTTCTTG	CCTTTCTGCC	TTTTGCCCCA	ATCAGTTAGC
20201	TTTGATGGTG	GGAGTGAGGG	GATGCTCAAC	CTCTCAGGCA	GGCTAATGGC
20251	TCTCAGGAGA	CACAATCCAC	AGCTGATTGG	CAGTTTTCTC	CCCAAGATAT
20301	CTTCAGAACA	AACCCTGGTG	CTGGTGAGTG	ATCCATGCAG	CATGAAAAGA
20351	GAGGGTGAAG	CTTGATGAGG	CATGTTCCAG	TCTCATCAAA	CTATTTTGTT
20401	TCCATAATTT	TCCTTCTCAG	AAAAGGGCAG	AATCAAGTAC	AGTTGATTCT
20451	CATCATTTAT	GGTAATTCCT	GTGTTTTATA	AAGTTGCTGT	AAATCCTGAA
20501	TTAGCAAATA	GTGAACCGTT	GCTTTTAGGG	GAAATATACG	GTTAGGTTCC
20551	TGTAGCCTC	TAGTCACAA	ATTTTCTTCT	TCTTCTTCTT	CTTTTTTTTT
20601	TCGAGCTTAG	GGTCTTGTTT	TATCACCCAG	GTGGGAGTGC	AGTGGCGCGA
20651	TCTTGGCTCA	CTGCAACCTC	CACATCCCAG	GTTCAAGCGA	TTCTCCCACT
20701	TCAGCCTACC	GAGTAGCTGG	GACTACAGGC	ATGCACCACC	ATATCCGGCT
20751	AACTTTTGTA	TTTTTTGGTA	GAGGTGGGGT	TTCAACCAT	TGGCCAGGCT
20801	TGTCTCAAAC	TCCTGACGTC	AGGTGATCTG	CCTGCCTCGG	CCTCCCAAAG
20851	TGCTAGGATT	ATAGGCATGA	GCCATCACAC	CTGGTCAGGT	CACATTTTCA
20901	TCAACTAAAT	ACATAACCTT	GTTGTATGTG	TGTTTTCTGT	TAAAGACATC
20951	TTATTTTCATA	TATACTGTTG	ATTTGTTAGC	ATTGAACTCA	CAGCCACAGC
21001	ACTGTGACTC	ATTTCTGAAC	AAAGTTATCT	AACACACATA	TTTTCTCCAT
21051	AAGGCACCTC	GCATCTTGCA	CTTAGGAACA	CTGGATAGCA	CTTCAGCATT
21101	GCACTTGGGG	GTGATTTTAA	ACAGTGCAAA	CACTAACAAA	AAAGCACAAA
21151	ATGTGAAAAA	CATGGCACTA	AATAGATCAC	AGAATGGACA	CTAGCTTACA
21201	GCATGAGCGC	TCGAACAAGA	AGGCAGAGCG	CTGCCTTGTT	CAACCTCAGC
21251	TGAGGACATG	TGCATCGGGT	GACTCAAAC	TTTTTCACTG	CTGTGTGCAT
21301	GACTGCGAAT	GACTGCAGAA	CACCATGAAT	ATTGATTGTA	TTTCGGGGTT
21351	ACAAATAAAT	TTTAACACGT	AGAAGAATTT	GCAAATATAT	ATTCTAGTGA
21401	TAATGAGGGT	CAGTTGTCTT	TCTTACTTCA	TTACAATAAG	ACTCTACTTC
21451	AATTCAGTAT	TTTTATTTCA	TTTTATTTTG	TTTTTGAGAG	ATAGGTTCTT
21501	GCTCTGTAC	CCAGGCTGGA	GTGCAGTGGT	GTGATCCTAG	CTCACTGCAG
21551	CCTCAAAC	CTGGGCTCAA	GTGATCCTCC	CGCCCCAGCC	TCCCAAATAG
21601	CTAGGACTAC	AGGAACATGC	CACCACACCT	GGCTAATTTA	TTTATTTTTT
21651	TGTGGAGACG	GCCTCCCTAT	GTTGCCCAGG	CTGGTCTCCA	ACTCCTGTTT
21701	TCAAGCCATC	CCCCTTCTCA	CTCTCCCAAA	GTACAATTTA	GTATATTTAT
21751	TAAACCTGTG	TTCCAGGCTT	TTTGATTGCT	ATTGAGATGC	TAATGAGATG
21801	GTCCCTGTCA	TAAAGAGCG	TCCATTCTGG	TGGCACAAGG	AACTCAAATT
21851	ATGACACAAG	ACAGAATACC	TACTCCAGAA	GAGAGTTCTG	TGAAAGCGTG
21901	AAGGAGGGAC	TTGAGTGTGC	GATTCAGGAA	GGACTTCACA	TTGGAGGGAG
21951	TTTTTTTAGA	TAGGTCTTGA	GAAACATTTT	ACATTTTGAA	CACCTCATAC
22001	ATCATTGATA	AAAAAAGAA	GCAATTGGTC	GAAACAACCT	CATTTCCCA

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22051 GATCAAGTCT TCTAGGTTAC CTGCATCTGC ACCCACCAGT CCCACCTTGA  
22101 TTCCTCTCTA GATGAAGGGC GTCTTTTCCT ACCTAAGGCC GTCCCTTCTG  
22151 CTTATGCTGG GGACTCCTTT GCTCTTTGGG GCATCCTCTC TTCTCCTGGG  
22201 GAATTGATCT CTCCCTCTCT ACTTGAATAT TCCTACTAGT GTATACATGG  
22251 GCTTCCGTGT CATCCCCCTT GATCCCGCAT TGCCGCCAGC CACCCCTCAT  
22301 TCCTTTAGGC CTTTCACAGC AAAATTGCTG GAAAGGGTGG TCTGAAGTCA  
22351 CCATCACTAC TTCCTCCCCT CACATTCTTT CCAAGCCACC ACCACTTTAT  
22401 GGGGGCTGCT CCTTTGGAGG CCACCTATGG ACATTGCATC ACCTTTCTGT  
22451 CCTTTTATCT TAAGTACCAG TTAGGATGCT TTCAGCTGCC TGTTGCAGAA  
22501 TGTCCTGATA CAAGTGACTT ACACAATACG GACATTGACT GTTAAGAGAG  
22551 TTACGTTCTC ACTGAACAAG GATGTTCCAG GCTTGGCTTG GGTGTTTCAT  
22601 AACACCTTCA AGGACCCAGA CTTCAGTTTC CTGCCCTGCC TCTCTTGATC  
22651 ACATCAGCAG ATATTATGTC GTCTAAAAAC AGGGAAGGGA GTGAAGTAGC  
22701 CTCTGTGTTT TTCTTTTAT CATGGAGGAT GTTTTTTTTG CCCTGCAAGC  
22751 CCCATGCACA TTTCTTAAAT ATCACCCCTT AACTCATCC CTGGCAAAGG  
22801 GGGATGGTAT TATCCTTATT GGCTTGGACC AATTAAGATT CATCCCCTGA  
22851 GTCTGTGAAT GGGACGCATC TTCTTTGAAA TGTGTGCTAT TAACCAAAAT  
22901 TGGATCTGTT AAAGGAAGGG GGAGCGCCTA AGGTGAAAGT GCCAGGCAGT  
22951 GTCTGCCACA TTTTCCTTGA CCCTTCCTAG CAATTTTGAC AGCCAGCCAC  
23001 CCCATCCTTC TTGAAGCACT TCATTTCCT CACATGCTTT GTGACATCAT  
23051 TTCCTCTGGG TTTTATTAT TTATTATTAT TTTTATTAT TTGAGACAAA  
23101 ATCTCTCTCT GTTGGCCAGG CTGGAGTGCA GTGGCAGCAT CTCAATTAC  
23151 TGCAACCTCT GCCTCCCGGG TTCAAGTGAT TTTCTGCCT CAGCCTCCCA  
23201 AGTAGCTGGG ATAACAGGCA TGTGCCACCA CACCTAGCTA ATTTTGTAT  
23251 TTTTAGTAGA GACAGGTTT CACCATGTTG GCCAGACTGG TCTTGAAGTC  
23301 CTGACCTCAG GTGATCCACC CGCCTCGGCC TCCCAAAGTG CTGGGATTAC  
23351 AGTCATAAGC CACCGCGCCT GGCCGCTCTG GGTTCCTTT TAACCTTTCT  
23401 GGCCACTCCT GTTTCCTGTT GACTCCTTTC TCATTGCTCT ACCTCTAATT  
23451 GGTGGAATGC CCAAATAGTT AGACCTGAGG TCCTTCTTGT CAGGATCTGT  
23501 AGGTTCTCCT GAGTGATCTC AGCAGTCCCT TTGTATCATC TATATGCCGA  
23551 GTATATCCTA AACTTGCTTC TCTCAAGAGT TTGTATCTC ATTGAATGAG  
23601 TTTCCCATCT CATTGATGGG CACCGCCATC TATCTGTATA GTTGCTTAAA  
23651 GTACGGGCAT GTTGCATGAG TCCTCTGTTT CCCACCCCTG CCATTTTGTT  
23701 CTCCACTCAC CAGCAAGTCC TGCCTGATAC GATATCTAGA ACACATCCAG  
23751 AATCTGTTTG TTTCTCTCCA TTTCTGCTCC TGCCACCCTC ATTCACGCA  
23801 TCTTCTGTG TGGAGAGCTG ACAGCCTTTT TATCGGCTC CTTTCTCTA  
23851 CCCTTGCTCC CAATAATTGA TCCTCCGTGG AACAGCCACA ATGATCTTTT  
23901 AAAAATATGA ATCTGATTTT TCTTGACCCG CAGCTTAAAA TTCTCTATCG  
23951 GTTCTCTTT CCACTCGGCA TAAATCTGC TTTCTGGTGC TGGCCTGCAG  
24001 CACCTTGAGT GCTGGCTGTG CTGACCTCCT TTCCAAGGCT GGTCTTGAGC  
24051 CGTCTTCTC TAACCTATGC TGCACTTCTT TCTGCTTCC TTGAATAAAA  
24101 CAAGCTCCTC CTGATCTGAG GGCCTTTACG GGACCTCTT TTTTCTTTT  
24151 TCTCTAGGA TTATCTTCTG CCCAATTTT ATAGGACTGG CTTCTCCTCG  
24201 CCTCTGAAAT CTCAGTCCAA ATGTCATGTC CTCCAAGAA CTTTCTCTAA  
24251 CCGCCCACTC CTGCTGGGCA CCCTCTGTTG TAGCATACTG TTAGGAGTCT  
24301 CTGCATCATG CCTCTAACTC TTTGAAAAA AGTTCTATT GTTAGTTTAA  
24351 TAAACTAAAA CTAAAAAATT TATAAACCAA ATTTCAAAT TTTAAAAATT  
24401 AATAAACTAA AAACAGTACA ATGATATCTC TGTGAAGTCA AGGGAGGAGA  
24451 GAGTTTAAAG AAGGGGAAC TAATTAGCAG CACTAAAGGC TCTACAACGA  
24501 CTCAAGATAA TGATAATGAT GATGATGATG ATGGTGATAA TGACAGTGAT  
24551 AACTAACATT TATTGTTACT ATGAACCTGG AAGAGTGCCA GGCATTTTGC  
24601 GTACATTATC ATATTTAATT CTGACAGATT AAAAGTCTG ACAATGCCTC  
24651 TACTGTCAAG GATGTTTATT CTCATTCTCA GAACACTGAG ACTTAGGGAG  
24701 GTCAGTCAAA GTGCTGGCA CATGGTAGCT TTCGATTAAT GTTTGCTATG  
24751 TGAGTAAATA AATTTCCACA AGGTCCTGGA GCTGGTGAAT GGTAGAGTTG  
24801 AGAGTCTAAC TTAGATCTGA CCGAATCCAA AGTCCGTATT TGTAACCACT  
24851 GGTCTATATT TGCTCAGATG AAGACAGAGA ACCCCTTAAC AGATTGAGAA  
24901 AAGGAAGCCT AATATAGGAT AAATGATTTT TTATTTATTT AAAACATGAT  
24951 AAATAAAATT AATTTTCAGT CCAAAACCTT CTGAATTTTG GAATTCTGGA  
25001 CTCCATTCAAT TCAATTCAAT TGAAGGCATA GGTGAGTTCT TTAAAGAGAG  
25051 CATTAGGAAT GAATCCAGAT TGAACAATTT TCTTATTAAA ATACCCTAAA  
25101 GATGCATTCT TATGATGAGC CAGGTTTATT GTCCAGGAAA GCTATTAAAA  
25151 CTCAGTCTTT GTGATGAGTG CAGTAAGAAC CCCACTTGAA TTACGTAGTG

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25201 AGCAGGTGCT TCCTAAACCA AGTTTCATGT TTGACAAGCT AGGAGAGAAC  
 25251 CCAGTGTAA ATGTTTTCTG GCATGTTGGC CTTTGGTTTC TCATATTATG  
 25301 GGACATATGT TTAGTGCTTG TGGTATATGC TTAGCCTACT CTTGTAGGAT  
 25351 GACTGAGACC TCACACAACA TCAAGGACAT AGTCTTTGCC TTTGCTGAGT  
 25401 TCAGAGTGTA ATTGGAGTGA TGAACATAC ATGTGAATAA ATGCAAAGTC  
 25451 ACAAGTAAAG ACAGTTAATG TGATTGATGA AGGACGTGTG GCACAAGATG  
 25501 GATAAGAATG AGAAGTAGAA GAAGTAGGTG GTTTTGAAC TTCGTTACTC  
 25551 AGGGAAGGGA ATGTATGTGG ATTGGTGGAG AAGAGAGGGG AGGAAGATGG  
 25601 TTTTAAGCAC TGGTAAGATG GTGCATATTT GCAAGTTTTG CTCAAGGGAT  
 25651 AGAAAGGGCT GAGACCCAGT GGGGAGGAAT CAGAGGGGAA TCGGCAAAGA  
 25701 GAATTAGGGA AATGAGAACT GTCAGTAGAG GAAGTGAGAT TAGGCTGGCC  
 25751 GGGAGCTATT TGGGGTTTCT GAGTACTGAT GTTACATGAA GGAATATTTG  
 25801 TGAGGGATAA ATATTGCAGT GGGTGCATTT GAGAGCAAAA CCAGATTGAG  
 25851 GCCCAGTTAG GGAAGGTTT CTTAAACGTC GGCCTTTCCT ATGCCATCTT  
 25901 CACTTTTTAA TTTTTTGGTG GCCATATTTA GATATCAGCT GTGTCACTAT  
 25951 ATACTTAATA TTTTCTGTAA GTTGATTTCA CTTTTAAAAA CTTAAATTTA  
 26001 GCTTTGCCCT ATGCAATAAA CTTATCATTG TTTACTGAAT GCTTTTCTTT  
 26051 AAATTTAACC CCTTAAATCT TAAATAAATG TAGCCTTACC CCAAGCACTA  
 26101 GTACCTATGA AATCATAGGT ATTCTGTGCT AGTTCATTTT TTCCAAATGC  
 26151 ACAGTAAATT AAACCTGCGG CCATTAAAAA AATGTTGCAT ATGTGTGTTA  
 26201 CCTAATGCTC TCTTGTGTAC CTATGGTTCA TGTGCTACAC TTTTGGGAAT  
 26251 ACCCAAGGCA CTGTTACAGC TTTCTAACTG TGACATGATG AAAGTGAATA  
 26301 AATAGGAGCC AGCTACATTT ATTAGATACT TACTGTGTGC AAGCCCTTGT  
 26351 GATGGAGGAG ATGAACATAT GATGCAGTCC TTACTCTTAA TAGATTTGGA  
 26401 ACAAAGCAGA GAGAGAATGG CACACCAATG AGAAAGTGAG ATGTAGGCCT  
 26451 GACAGGTCCA ATCTCTGCCA TGTAAGCAG CTTTTAGATA AGCCATCTGA  
 26501 TATCAGCTCT GCCACTGGTC AGCTGAGTGA GCTGCCACTC TGGAACCCAA  
 26551 GGGTAAGCTC TCCTCAAAT CAGTTCACCT CAACAAGTAT TTGCCAGATA  
 26601 CTATATGACA CTTTTGCAGA TATTAAGGAA ATTAAAGTGT CTTAGGGAGT  
 26651 GTTAAACCAG AAACCAAAGT ATGAAGTGGG AGACAGAGTG GAATAAGGAC  
 26701 TGTAAGAGAG ATGCAATGAC ATGTATTCCG TACTTACGGG AGGAAGAGTT  
 26751 TATAGCCAGC TTTGGGGACC AGGGAAGGCT TCCTAGAAGA TGTGTCATTT  
 26801 CAGATGAAC TTTAAAGATG GGATCATACA AAAGGCAGTG ATGGAGGGTG  
 26851 TTCAGCAGAG GGAAGGGCAT CATCATGACA ACAGAGAGGG AAAGTGAAGC  
 26901 ACCTGTGAGG AGAAGAGCAA GTCTCCGTTG TTTGGTGGTG ATGTTGGGGG  
 26951 CATGAAGGTG GAAAGGAAGG TTGGGGTCTT ATGGATACCT TACATGCTAG  
 27001 GTTGAACATG GATTTATTTT CACAGATGAT CAGGAGCCAT GGAAGGCTAC  
 27051 ACTAGCTGGG CGTACATAAT TTAAGTCAGA GGGACAAATA ACTGCAAGCT  
 27101 AAATACTCTT AGGGAGAAAC TGCAGCAATC TGGGTGAGAA ACAATGAATT  
 27151 TGTGAGTAGT CACCATAGCA AAGGTCTGGG CTAGGGGGGC ACTGGAGGAG  
 27201 TGAAAAAGAA AGGTTTAAAT AGTCACTGAG AGGGCTGAGG ACCCACTAGC  
 27251 CACTGGCATA GTGGAGTCAA TCATTTCTCC GAAATTACGA GGAGGAGAGG  
 27301 TGGGGCATCT CTAAGGCGTG GAGCAGTGGA GGATGGTGAT TGTATGGTAG  
 27351 GGGAAAGAAG ATAATGATCG CAGTTCAGT AGGTGATGGA TGAGGAGGGG  
 27401 AAGGCGTTTT ACAGATTATT CACTGGGAAA GAACAGAGGC AGTCCACACT  
 27451 GTAGTTAATT CCTTTTATTT TTGTCTTTAA GTATACTCAA GGATAAATAG  
 27501 CCATACAATT TCTGTTTGGC TTTTCATGCT GGAGAGGTGC AGAGGTTGCA  
 27551 CTGAACGTGG ACGATATTAA TTTTGAAGTG TACAAGGGTA CTGTGCTCTG  
 27601 GGAAGTGGCC AATAATATTC TATGAAAAGT CATTGTAGTA ACTCATTTTT  
 27651 ATACATAAAA TAGGTAGTTC CTTTTCATTT TCCTTATATT TTGGGATACT  
 27701 TACATGCCAG GATTCCTCTA TTTCATCTC TTGTTTTCTA CCTGAAAAGA  
 27751 TCTTACGGTT GGTGGCTGTG GATGCAATTC TGCCTTTACA CAGAAATGAC  
 27801 TCTCTGGGC ATACCTTTAG GCAAAGAGCA GATGAACGCA TAACGAGCAG  
 27851 CTTTGAGATT TGGTATTCCC ACTGCAGAAC GAAGAGAAGG GTGGCCCACT  
 27901 GGAAATTTCC TCAGAGAAAC GTCTAAGTCT GCATCTCCCA CATCCATTCA  
 27951 TTTTCATGCA TAGTCTTTT ATCTGTTGTT TTTTAATTTA TCTATTTTAT  
 28001 ATAATGTCTA TCTCTGTAGT ACCTGGGATG AAATGCGCCA ATCCTGACTG  
 28051 CAATGAATAG GGCAAAGCAA TTCTTGGGAG CTGCTCTGGG CAGGAAGTGG  
 28101 AGGCTGAATT CTTTTAAAGG AAAATTTTTT GGGGATCGTG ACTCACTGGC  
 28151 CTTTATCCCC ATCATCACTG GGATTGTTTA AGTGCCAGGA AACAGCTGGA  
 28201 AGTCGACAGA CAATTTAGGG TACAAATGAA AGGAGAAGTT ACTGTTAAAG  
 28251 GGATCTGTAT TCTCTGTTAT CAAAACCACC AACGCTGTCT CCTAGCTAAT  
 28301 AGGAACCAAA ACTGTGCCCT GAGAATGCTG CCAGATGTTT CTCAATAGGC

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28351 ACGTTACGTT TTATGGTCCT GGATGCTGCA CTTAAAAATA GTGTCCAATT  
28401 TCAAACCTCAC TATTAAGTAG AACTAAACT TTTGGAATCT ATTAATGGAT  
28451 CTAGATCTCC AACCTAGTGG CAACAAATGT TTGAAGTGAA GTTTATTGTT  
28501 TTAAGTGAAT TTTAAATGTG AAATGATGAG TATTTAACTT CAATTTTTTT  
28551 GCATGATTTT TCCACTGTGG CAACTTTCCT TTTAAATGA TAGAACCTCA  
28601 TTATAATGTG GCTGATAGGA AATCTGTTTA TTCATGCATA TATTTATTCA  
28651 TTTACAAATA TTTATTACT ACCTACCAGG CTCTGTGCAG TACTCCGATA  
28701 AACTGGAACA AGAGCCATAT TTTGTACTTT GTATGTTTTCT CCAAGAGAAA  
28751 TGTTCTATTG TACTACATTA ATTCTTAGAT GCATTTTTGA ATTATTTACC  
28801 CTTCTGAAAT CAGAATGTGT CTTACTAGCA ATATGTCATA ATTTAATTGG  
28851 CAATTTAAAT TTTCAAGAGG CACATAAGAT AATGATGTGT TTTGTAATTG  
28901 ACAATGTCTT GATTTGATAG AAGATATTTG TACAATACTA TATTGGTACC  
28951 ATGCTTTGGC CGATGTAATG GTCCTATTTG GAGTTCATA CTAATGTTAA  
29001 GCCTCTAGTT TTAGGCGTTG ATGTTGGTCC AGGGACACTA GGACTCAAAT  
29051 GCCCAGATGT CCAGGTCTAA GAGAGAAGAA TCAGAAGGTG AATGCAGAGC  
29101 CCAGTGGGTT CAAGCCATGT AGACAATAAT AGCAGAATGG AGAGACATTT  
29151 TCCGATGCCCT CATGTCATG CATCTTCTCT CCCTTCTGG CCTGCCACAT  
29201 AAATTCATTG CAGTGCAACT CTGCCAGATA TCAGAATAGA GCAGGAGGAA  
29251 AGAGAAACAG CTGCAGCATG GGAGATAGGA CTCATACCAA GAGAGATTAG  
29301 GCTCGGTGTG TATACCTAAT GATGGTAAAG TGAACAACCA GGTACAGTG  
29351 ATAGCAGCAA CACGCAATTA TCGAGTGTCC TATCCACTTC AGAAACACTA  
29401 TTTTAAATG ATAACAATTC TACAAGATAA GTATTCATTG ATCATCAATA  
29451 TTATCCTTGT TTCATGTGTA AAACCTGGGC TCAGAGAGGG TAAAAAATT  
29501 GTCCAAGGTC ATACAGTTAG GAAATGGTAG AACCAGGATT CAGGCTTTGC  
29551 TCCATGGGGC ATCAAGGTCT GCTCCACTTC CAGTGTGCCA TGCAGTTTCC  
29601 CCAAATCTGA GAACATGCAT TTACTTTATG TCCGGTTATG TGAGGTCTCA  
29651 GAAGCCAGAC AGGGCCAGAG TATGAAGAGT TACATAAAAG AGCTTCAGAA  
29701 CTAATAGGG TTCCTGAGCA AGATTCTACC AATACCTGGA ATAACCTCCT  
29751 CTGTGTATAG CCCAGGTGCA TGGACTAGAC CAGATTGGGA GGGGATGGTT  
29801 GCCCAGCAGG CCCAGAGAAG GAGCTGGTAG CATGGTGAGT TAAGGGCTGA  
29851 GGATCAAGAA TTTGTTAGTT TAATTAGACC CCCCAGAG CAGAAGTGCT  
29901 GTGTAGTTA AGACTCTGGA ACTCAGTGAT AGGATATTTT AATAAAGCCC  
29951 ATGATCTCAA GAGGAACCTG CTGAATGGAT GAGCTCACAG TCCATAGTTG  
30001 GGAGCTAATG AACCACTTTA ATTATGTTTC TGATACTAGT GGAGGTGTTT  
30051 TCCTGTCAAT GAATTCCTTT TAGATTTTGA CCCCATGTAG ATCTCAAGGA  
30101 AATAAATAAA TAAATAAATT AGTTAATTAA TTTATTTATT TTGAGATGGA  
30151 GTCTAGCTCT GTCGCTCATG CTGGAGTACA ATGGCACGAT CCCGCCCCAC  
30201 TGCAACCTCT GCCTCCCTGG TTCAAGCAAT TCTCCTGCCT CAGCCTCCCG  
30251 AGTAGCTGGG ACTACAGGTG CCCGCCACCA CGCCTGGCTA GTTTTTGTAT  
30301 TTTTAGTAGA GTGGGGTTT CACCATGTTG GCCAGGCTGG TCTCAAACCTC  
30351 CTGACCTCAG GTGATCTGCC TGCCTCGGCC TCCCAAATG CTGGGATTAT  
30401 AGGTGAGCCA CCATCTCAAG GAAATTTAAA ATGTTTGGGT TTGCTACTGA  
30451 AGAGCCAAGA AGAATTTTGC AAATTATGAG AAAGAGCCCA AGCTTTCAAA  
30501 TGTCCAAGGT GGCTATTAT ATCTGGGAAC TAGGAAGAAT TCCAAGTTGT  
30551 TCACCTATGC CTGTTTCTAA TGCCCTCCCA CAAGGGTGAC AGAGCAAAGT  
30601 TGATTTCTAT TAATTTAGGG GAAATAATCT CCACTGAATG GCCAGAACAA  
30651 TAACCTTTCT AATGACACAC AGAACAACGC TACTGTCACC CTTGTACCGG  
30701 CTGTAATGTT CATCATAGGT ATTTATTAGG TACTTAAATA CTTGTTTGGC  
30751 TCAAGATAGC TCACAAAGAG GGTCAATAAG TCTCGTTTTT TGTCTTTTAG  
30801 AGTTTCCAGT ATAAGAACAA ATAGATGAGC AAACACATAT AAGAAATACA  
30851 TTGAAGAGAA TTAGAATATT CATGAATGTA CAGTGAGAAA TTCTTAACCT  
30901 ATACAGGGTC ATAGTTGACT TCATTTAAAT ATTTTCTAAG GGTAGAACGC  
30951 AACATTATTA GAATACCTGA GAGGGGAAGG TTGGGACCGT GCCCTGAAG  
31001 TAGCATATTA AATTTAAGAG AGGAAAGAGA AAGCTGGCAA TATTTCAAGT  
31051 CTGGAACCTGA TCCTTAAGGC AATACTTTGC TGCTGGAATT TGTATTTTAA  
31101 AGACCAGCCA GAATCTCTTG TGGTCCTTTG CCCATGTAGC CCTATGAGGA  
31151 CGTTTGTATA TTTGGATTGC TTGAGGCCTG AGTGTCTATG GCATAGGCAG  
31201 AGTCATTGGA TCAACCCATG TATCTGTTGC TTGACACATT GCTCTGGATA  
31251 CATTGTACCC AAGAAATCAG CCCAAGTGGG ATCCAGCCCA AAAGAGAATT  
31301 GTTGATTTTC AAAACTGAAC AGTCCAGGCA AAGCTCAATC TAGGGCTCAG  
31351 ATCATGCATC CAGGACTGCA TAGTTCTTCA TTTCTTGATT CGTCTTCTTT  
31401 GCATTGCTCT ATTCTTAGGC AAGTTCCATC TTGGAAATCC TAAGGTGGCT  
31451 GCCGAAGGCT GCAGACCCTC CTCTGTCTTC CAGATTTACA TCCTTCAGGA

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31501 GAGCGAAAGC TCAGTTCCTT AAGGCTGAAA CAAAAGTCTT GCAATGGCAT  
31551 CTTTTTGGTC CTGATTGGCC TGTCTAGGGT CAGATACTCA TTCTTTAATT  
31601 ATCATGGTGG TGATTGGGGG AATCGAATGT GCTAATTGGC TTTGCCTGGG  
31651 TTGTGTGCTT CACTCATGGA ACCTAAGAGA GAAGCCCAGT GAAGCCCAAC  
31701 TCAAGGGCTG AGAGTGGGCT GTAGTGGTTT CCCTAAACAA AATCGGTACT  
31751 GTTGACATAA TATGGCATGG TCATGGATGC TGAGAGAATG ATGTAGAGAA  
31801 AGGGTGGATG AGAATGGAAG CAGGACTAGG CACAGTGGTT CACACTTGTA  
31851 ACTTCAGCTA CTTGGGAGGC TGAGGCAGGA GGATCGCTTG TGGCCAGGAG  
31901 TTAGTGACCA GCCTGAGCAA CATAGTGAGA CCCTATCTCT AAAAAAATTT  
31951 ATTTTTTAAAT TAGCCAAGTG TGGTGGTGCA TGCCTATAGT CCCAGCTGCT  
32001 TGGGAGACTG AGGTAGGAGG ATCGCTTCAG CCCAGGAGTT CAAAGTTACG  
32051 GTGAGCTATG ATTGCACCAC TGCACACTAG CCTGGGTAAA CAGAGCAAGA  
32101 CTCTGTCCAT AAAAAAGAAG AAGGAGGAGG AGAAGGAGGC TAAGAAGAAA  
32151 GGAAGTGGGT AGTCTAGTTT GGAGGTATTG AAGTCCAGGC AAAGAATCAT  
32201 GGTGGCTTGG ACAAGCAGAG TGAAGTCTGA GATGGAGAGT GGTGGATGGG  
32251 TTTGATTTCT AGTTTGGAGA TGGAAATCCAC AGCATTGCT GATGAAATAC  
32301 ATGTTGAAGA TGGTAAGGAA AATAATTAAA AATGATTCCCT AGGCTTGTGG  
32351 ACTGAGTAAC TTGGGAGGAT GGTGGTAGCA TTTCTTGAGA TAGGTAAGAA  
32401 TGGAGGGTTT TTATTATTTT AAAATCAACT ATGCTATTCT AGCTCTGTGG  
32451 GATTTGAGAA GCCTGTAAAT ATCTGAGTGG GAATGTCAAT TGGACAGTTG  
32501 GAGACAGGAG TCTGGAATTT AGAGGGTAGA GCTGGAAATA TATATTCATG  
32551 GATATATGAA TCCATAATGA GAAGGGGTGG CTATAGCAGT TTTTATTTTT  
32601 ACTTTTAAAG CCATTTAACT AGTTTATTAA ATTGGCGGGC CTCTTGAGA  
32651 GTACAAACCA TAAATCACTT CATTTATCTT CAACTCCTAC CTTCACCTCT  
32701 GCCCTGTGAG GCCAACCCCTG GATGATACAC CAGAAATACC TCACAGCTTT  
32751 TCCAGGCACT TTAATAATCA AATCAAGTAA AATAGAAATA AAAATTGTAC  
32801 TTTTTTTTTT AGATATTCAA AAGTCCAGTT TTACATGAAT CAAAACATCA  
32851 ACCTCTCATC CAATTCAAAG CTCTCTTTCA GCCGGGTGAG GTAGCTTGTG  
32901 CCTGTAATCC CAGCACTTAT GGGAGGCCGA GGCAGGCCAT CGCTTGAGCC  
32951 CAGGAGCTTG AGACCAGCCT GGTGAAACCC TGTCTCTACT GAAAATACAA  
33001 AAAGTAGCTG GGCCTGGTGG TGTGTGCCTG TAGTCCCAGC TACTCGGGAG  
33051 GCTGAGGCAC AAGAGTCGCT TGAACAAGTG GGGAGGACTT TGCAGTGAGC  
33101 AGAGATCGTG CCACTGCACC CCAGCCTGGG TGACAGAGCC AGTCCCTGTC  
33151 CAAAACAAAA CCAAACAAAA AAACCTGTAA TCCCAGCACT CTGGGAGGCC  
33201 GAGGTGGGTA CATCACCTGA GGTGCGCAGT TCAAGACCTG CCTGGCCAAA  
33251 ATGGTAAAC CCCGTCTCTA CTGAAAATAC AAAAAATTGG CTGGGCATTG  
33301 TGGCGGGTGC CTATAATCCC AGATATTCTG GATGCTGAGG CAGGAGAATT  
33351 GCTTGAACCC GGGAGGCAGA GTTTATATTG AGCCGAGATC GCGCCATTGC  
33401 ACTCCAGCCT GGGTGACAGA GGGAGACTCC ATCTCAAACA ACAACAGCAA  
33451 CAACAACAAA ACAAAATCAC AAAGCTCTCC TTTCCCTGTA GGCCAGGCCT  
33501 GGCTGAGAC ACTGCAGATC AGCCATGGGA AAGGGAAGGC GGGGGCCGTG  
33551 GCTGTTCTCT TTTCCCTCCT GTGCACACTC CTTTCTTGCT GGCTTTGCTG  
33601 CTTTTGGCTC CACCACAGTC AAGGGGCAGG GAGAAGGTGA CTAGAAAGCA  
33651 AGGGTGTGTT ACTTAGCTGG TGCTTCTTAT GGTTCCTTCT AGTCATGAAA  
33701 TAGTCTCTGT CTTGCAGGTG TCCAGCTTTT GTGAGTTCTT CGCCACCCTG  
33751 TGAAGACCCC CAGACTTTCC TCTACAGACA TGGATGATGC CCTCCCTGGC  
33801 TGGTCTCTTA TGACACCCCC GGCTCTCTAG CTTCTGCCTT GAGTGATCCC  
33851 TGAAGTTTTT TTCTCAAGTG GATGGAATTC TTGGGGAAGG CTTTTTTCTG  
33901 AAGGCTTTGA TGTAGCTTCT GACCCCATCC AGTGCCTACT TGGCCAGGA  
33951 GAAACCATTA GGCATCTTTG TGCTGCCATA TATGGGAAA GCACGTGACT  
34001 CCACTGTTTG CTACCCCTCT CAGCCTGCAT TACAGGCCAA ACGCTGCGCA  
34051 CCCATGTCTG ATTTTCCCAG GGCCGTCTCA TTGCACACCT CCAGAGGGCA  
34101 TCATTACAT GTGTTCTCCT AGAATTGCAC AGTTAATGTG GCAGCCCTGA  
34151 GTTCAGACAA ATCTCTCATG CCCCTACCTG TAGCAGTGCA TTCTATGAAG  
34201 TATGCAGTTC AGCAGGCACC CAGCTGGGGT TCCAGATGCT GAGACCCCTT  
34251 TCTGCCAACC CCTCTGATCT CTGAGCAGTT CTCTTTCTGC TCCTTCATTT  
34301 GCCATAGTGC TGCAATGCTA TGTGTTCTTT TCTGCTAAGA AATGCTTTTT  
34351 CTCCAGCGAA TTCTCTTATA TGGCTTAGAG ATCATATGCA AGCTCTGCAT  
34401 TGATGGATCC TCAGTCTTCA GTTTTGAGAG ATCTCAGTAT AAACCCCAAG  
34451 ACAACAGGAA AGGGCTCACT TAACATTGCC TTGTAACAGA GAAACCCTCT  
34501 CTTTGAATGA AAGCTGTCAG GGAAGCTCAG TATATAAAGC AGGTGACATG  
34551 GTGCTCCATT GGGGTGGTGG GGAACGAGGG GCGGGGTGCT CAAGGCTGGC  
34601 TTCTGTGCAC AGTTAGAAAA CTCCTGTGCC TGAGAAAGCC AACCGTGGTT

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34651 TCCACGACCA GGAGTTCCCT ACTATTTACA GTTCTGCAGT GTTTGGCTTC  
34701 TTCATGATTT TCTGCTGGTG AAAGCAATAG TTTGTACAAG ACGTGTGGGA  
34751 ATAAAAATAG TCCAGGTGCT GCCCTTTTCC GCGGCAGAGG GACCACCTGT  
34801 CAGGCTGCCC TAGTGGGCCT CTTCCACAG CACGGTTCTG CCACTTGAAT  
34851 ACCTCCCTGC CTGTTTCTCTG ACGCTGACCT AGAAGCTTCT GGTGAATGCT  
34901 TTGCTTCTGC ACAACTTGCA TGGTGGGTGC CTTTTTTTGT TGAATGAAAA  
34951 GGTCTTCTCT TGGCTCTGAA TATAGCAACT GCATGACCTG CAGAAATAAT  
35001 TTTGTTTGTCT CCTTGTGGCC ATGTTAGCTT AGGGCTTTGT ACCTTATAGG  
35051 GACATTGGCA AGAATTTTCT CAAAAGGTTT TCATCTGTAA ATTTTCATCT  
35101 TTGCACATAG TAGAGAGCTT AGAACGTCAG TCTCGTTCCA TCTGTTATAA  
35151 GTTTTGTAGGC TTTGGGCAAA GTACCTAACT TCCCTGTGCC TCGATTTCTC  
35201 CATCTGTAACT ACTGGAGCAA GAGTAGAACC TCCATCCTGG TCTGCGGTGA  
35251 GGCTTAGTGA GGGCATTTCAT GTGAAATGTA CACAGTGCCCT GGCACAGAGC  
35301 AAGCACCAG AACATGTTAC TAATTGCATT AGTTTCTCT TGTGCTATA  
35351 ACAAGTTGCA CAAACTGCAT AGCTTAAAC AACACAAGTT TATCATATCA  
35401 TTCTGCATGT TAGACTTCCT AAGTGGGTCA TATGGGGCTA AAATCAAGGT  
35451 GTCCACAGGG CTGTTTCTCT CTGGGGGCTT TAGGGAGAAT CCTTCCCTTG  
35501 CCTTTTCCAG CTTCTAAAGG CTGCTCATGT TTCTTGGCTC ATGGCTGCAC  
35551 CACTGTAACC TTTGCATCTG TCCTCACATG CCTCCTCTCT CTGGCCCTCC  
35601 CGCTCCCCCT TGTGATTACA CTGGACCCAC CCAGATAATC CAGGATCATC  
35651 TCCTGATCTC AAGATCTTAA TCACATCAGC AAAATCCCTT TGTGCTGTA  
35701 TGGCACTAAG GGAAAGGTAT AATTTCATT TTAAGGATAA GAACACTGAG  
35751 TTTGGGGGAC CGAACATTAT CCTGCTGATC CTACCAATTA TTTAAAAAGT  
35801 TGTCTGTAA GTATCTACAG TGTGCCTCTG CTGTGTGCTG GGCATACAAG  
35851 GTGAATAAGA CACAATGCTT ATGCCAAAAT AGATACACAA GCACGATGCC  
35901 CTTAGTAATA ATCAGTAG CTGACATTTA CTGAGTATTT ACTATGTGCC  
35951 AGGCATTGTG CCAGGCACTT CAAGTGAATT ATCTTGCTGA AATCTCACCA  
36001 TGGCACTAAG GGAAAGGTAT AATTTCATT TTAAGGATAA GAACACTGAG  
36051 GCTTAGAGAG CTTAAGTATT TTTTCTCAAG GCCACAGAGC TAAGGACATG  
36101 AGCTCAGGTC TATCTGATTC TAAGCTTGAA CAATTCATCA CAGCCCCCTT  
36151 AAAAGATGGG TGGGTTTACC CTCAGGCTCT CTTCTTCACT GTGTGTGTAG  
36201 CTTAAAGATTG GCCAGCTTAA GAGGAGCAGA TCACACAAGC AGCTATGATG  
36251 AGGGCCAGTG GGCAGAGCTC CCAGAGGAGG CTGATGCAAC ATTGCTCCCA  
36301 TTCTTGCCAT CACCCAAAGC TGCAAGTCCA TGGCCCTGGC ACTTGGGCAA  
36351 ATGTGCTCTT GTCTTCAAGT GAATCTAAAA AACTGTGTAA GGGCATGATT  
36401 AATTCCACCA AACTGGATTCT TCCCCAAGAT CACTTACACC AACTAATGG  
36451 GGCCCTGCTT CAGCCTGAGG AACTGTGTGA ATAAAAGAGA AGAAGCCCAG  
36501 TGAGATTCTT CTTTCATGAT TAATAGAAAA ACCACCTGGT GACTTTAAAA  
36551 GGCAAAGAAG GAGGTACATT CAGATGAGTC AGAAAGAAAA GGCAGCATTT  
36601 GAATCCTAAA GGCCATGTTA CTCTTGATCT TCTCCAGGAT TTCTTTAGG  
36651 GAAATGGAAA TTTTACATG GAGGGCAGAG GTGGGGTGAA GGTGGACTG  
36701 TAGACTGAGT GGTGTTATAA TGAGACCAAC CCGGGTGCTG GGTGAATCA  
36751 TATATTCTAG ATGGGAAGTT TATATTCTAA TGAGGGAGAC ACACAGGGAA  
36801 TGAGCAAATC AGTACAGAA ACAATCTCAG CTAGCACTAA GTTGCTTTGA  
36851 GGAAATCAA GCCAGGTGGT GGGCTAGGAA GAGACTGGAG GGGAGAATGG  
36901 CCCTTCTGCA GTGGGGTGGT GAGGAAGGAA GTCCTCGCTG AGGAGGCAGC  
36951 ATTGAGCACT GAGAGGGAGC TACCCTGTAA GGCCCTGGC AAGACTGTTT  
37001 CAGGTTGAGG GAACAACACA CGTGCACTCC CTGAGACTAG AGCTAACTTG  
37051 GACAAATGAG AAGACCAGTG TGGCTGGGCG GTATTGAGGG ACAGATGGTA  
37101 GGAGATGAAG GTGGAGAAGT GGGCCATGGC CAGAATTTGG GGATCTAAGG  
37151 ACAGGAGTTT GGGAGGTTCC TCAAGGAGTT GTGGGAACCC TCTGGGAAGG  
37201 TTTTCAGCGT GCAGTGGAAG GATCGAATTT ACATTTTGGC AGGCAGGTTA  
37251 GGCACTGTT GTGCAGAAAC AACAAATGGCT AATGGGCTGG TTGAGGTGGG  
37301 AATGAAAGAA GTGTTGGAAT GAAATCAGGA TGTATTTGGA AGGGAGAGTT  
37351 GGCTGGACTG GCTGTGGGTG TCAGGGCAGG GTGGAGCCAT AGACTACTCT  
37401 GGATTTTCTG TCCAAGCCCT GGATGAATAG CAGTACCATG AATTGAGATG  
37451 CACAAGCCTA GGAGAAGAGG CAGATTTGGG ATGTGAATGT GTATGAGTGA  
37501 AAACAAAATT TCTCTTTGAA TCATGTTCAA TGTGCTACTT GGACAAGCAG  
37551 CTAATTGGAC AACTAAGTGT AAAAATTAAT TAGTGAACAA TGAGTGGAAC  
37601 AAAACGTTAG AGCTGTACAT TTTGCTTTAG AAGGGGCATA CTTTTTGCTT  
37651 TAGAACCTGT GGCAATCTAA TACAAATGGC CAACAAACAT ATGAAAAAAT  
37701 GCTCAACATC ACTAATGATA AGGGAGATGC AAATCAAAAC CACAAAGCGA  
37751 TACTGCCTTA CCCCTGCAAG AATGGCCATA ATAAAAAAT CAAAAAATAA

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37801 37851 37901 37951 38001 38051 38101 38151 38201 38251 38301 38351 38401 38451 38501 38551 38601 38651 38701 38751 38801 38851 38901 38951 39001 39051 39101 39151 39201 39251 39301 39351 39401 39451 39501 39551 39601 39651 39701 39751 39801 39851 39901 39951 40001 40051 40101 40151 40201 40251 40301 40351 40401 40451 40501 40551 40601 40651 40701 40751 40801 40851 40901

TACATGTTGG	CGGGGATGTG	GTGAAAAGGG	AACACTTCTA	CACTGCTGCT
GGGAATACAA	CCACTATGGA	AAACAGTGTG	GAGATTCCTT	AAAGAACTAA
AAGTAGAACC	ACCATTGAT	CCAACAATCC	CACTCCTGGG	TGCATACCTA
GAGGAAAAGA	AGTCATTATA	CGAAAAAGAT	ACTCATACAT	GCATGTTTCT
AGCAACACAA	TTCACAATTG	CAAAAATATG	GAACCAGCCC	AAATGCCCAT
CAATCAATGA	GTGGATGAAG	AAATTGTGAT	ACACACACAC	ACACACACAC
ACACACACAC	ACACACACCA	TGGAATACT	ATTGAGCCAT	AAAAAGGAAT
GAAATGATGG	CATCTGCAGC	AACCTGGATG	GAATTGGAGA	CCAACATTCT
AAGTGAAGTA	ACTCAGGAAT	GGAAAAACCA	AACATTGTGT	GTTCTTACTT
ATAAGTGGGA	GCTAAGCTAT	GAGGATGCAA	AGGCATCCTC	ATTGGACTTT
GGGGACTTGG	TGAAAAGGGT	GGGGGCAGTG	AGGGATAAAA	GACAGCAAAT
TGGGTACAGT	GTACACTGCT	CGGGTGATGG	GTGCACCAAA	ATTTACACAAG
TCACCACTAA	AGAGCTTAGT	CATGTAACCA	AACACCACCT	CTTCCCCAAA
AACCTACAGA	AATAATAATA	AAAAAGAACT	TGTGGCAATC	TAATTGATGA
TAATTGATGG	TAGCATCCAT	GTTGGGGAAG	GAAGGAAACA	ATGCCAAACA
CTATGCTAGC	TGCTTCACAT	GTATTGTTTT	TCACAGGGTG	TAAGGCTTGA
GAAGCATCTA	GTGTCTGTG	TCAGATTATG	CATTCTGGAG	GCAGATTGCT
AAGGTTCAAG	TCCTGGCCCT	GCCTGTTAGT	GGCATGTTCT	ATGCTTTGCT
TGCTTATCTG	TAAATFGGAG	TAATAATAAT	ACCTTGCTTG	TAAAGTTATT
TTTACATTTA	AATGAGTTAA	TGCATGTAAA	GCACTTGGAA	TAGTGCCTGG
TATTGTAATA	AACAATAAAT	GAGCAATTTT	AATGTTACTA	TTTTATTTTC
TCCGTAGGGT	GCACCTCAAT	AGATGGAAGA	GTAGGGCATG	TGATAAGGTT
TGGCTGTGTT	CTCATCCAAA	TCTCATTTTG	AATTGTAGCT	CCCATAATTT
TCACATGTTG	TGGGTGGGAC	CAGGTGGGAA	GTAAGTGAAT	CATGGGGGCG
GTTCCCCCAT	ACTGTTCTCG	TGGTAGTGAA	TAAGTCTCAT	GAAATCTAAT
GGTTTTATAA	GGGGTTTTCC	CTTTCACCTG	ATTCTCATTG	TCTCTTGCCT
GCTGCCAAGA	AAGACGTGCC	TTTACCTTTC	TGCCATAATT	GTGAGGACTT
CCCAGCCACA	TGGAAGTGTG	AGTCCATTAA	GCCTCTTTTT	CTTTATAAAT
TAATTACCCA	GTCTCAGGTA	TGTCTTTATC	AGCAGTGTCA	AAACAGACTA
ATACAATGTG	TTATAACAAG	AGTGTTACTT	CAGAATCTTG	TTTTAACTTG
TGTATTAGTC	AGTGTGCAGG	ATGCTTGGGT	TCTGTCCTGG	TTTTTGCCAT
GTTTCCATTT	TATGAGCAGT	TCCTCTATCA	CAATATAGAT	GAATGCCTCT
ATCACAATAT	AGATGCAGCA	ATAAGTTGGG	ATTGCTGCAT	AGCCATCCCA
ACTTATTGGC	ATAAAACAAG	CATTTTATTA	TGCTCAGATA	ATGTGCTTCA
GGGATTCATG	CAGGACACAG	AGGCGATGGT	TTGTCTCTAT	TCTGCAACGT
CTGGGGCCTC	ACCTGGGAAG	ATGAGCCTCA	CCTGGGAAAT	CTACAGGTGT
CTGTGGGGTT	AGGGGAGGGG	GCTGAAATCA	ACTGGAGGTA	TCTTGGCTCA
TGTGACTGGT	GGTTGATTCT	GGCTCTTGCC	TGAGATCTCA	GCCTGGCTGT
TGGCTGGAAC	ATCTGTATGT	GATCACTGTG	TTTCTCCACA	TGGGTTAGCT
TGAGCTTCCT	CACAGTGTGG	CAGCTGGATC	CTAAGAGTGA	GCATCCCCAA
AGAACCAGGC	AGAAGCGGTG	TGGTCTTTCA	TTATTTAGCT	TTGGAGGTCA
CATAGTGTC	CTTCTGCTTT	AGTCACAAGC	CTGTCCAGAT	TCAAGGAGAG
GGAACATAGG	TTCGATGTTC	TCACGGGGGG	AATATTAAAG	TCACATAGTA
AGGAGTATAT	GGGATAGGAG	AGATTGTTGT	AGCTAGTTT	GGTAAATACA
GTCTTCCAGG	AGGCTTAACC	TGTGGGCCAC	TTATGAGCCT	GTCTGGCTTA
AAGGATCCAG	TACACATCTA	AATTTGGACA	TACTCTAAAA	TCAGGATCTC
TTTTATTTAT	TAAAGAACCCT	GAGTAATCTT	AACCTAAGTT	GTATTAAAAAT
TCAAAGATTG	ACTCCTTAGA	ACAGCTAAGC	TTTCGTTTCT	TTAATGGGCA
CTGATTGAAT	CTTGACTCTG	TGCAAGATCC	TGTGCTAATG	GCTGTGGGAG
CATATTGAGA	TGCCACAAGA	AGTTGGCATG	CTAAAAGGTG	AAGACAAATA
CAGATGGCTT	TCAATTAAC	AGTCTCTGGA	GAGACAGAGG	CCACTCACAA
CCTCTAATGA	TAGTTAAAT	AAAACCTTAT	CAGGCCAGGC	ACAGTGGCTC
AGGCCTATAA	TCCAGCACT	TTGGGAGGCT	GAGGTGGGCG	GATCACTTGA
GGTCAGGAGT	TCTAGACTAC	CCCGGCCAAC	ATGGCGAAAC	CCCATCTCTA
CTAAAAATAC	AGAAATTAAC	CAGGCATGGT	GGTGCGCGCC	TGTAATCCCA
GCTACTTGGG	AGGCTGAGGC	ATGAGAGTCG	CTTGAATCCG	GGAGGCAGAG
GTTGCAGTGA	ACTAAGATGG	TGCCACTGCA	CTCCAGCCTG	GGCCACAGAG
TGAGACTCCA	CCTCAAAAAC	AAACAAACAA	ACAAACACTA	TTTAAACAA
GACACAAAGT	GAGTTTAATG	CAAACTTATT	TAGTTAGCAT	TGCATTTAAT
GTTCAGGAAC	ACATGTTCCA	TTTGTAGAC	TTCATTAATT	ACAACATAGCA
GTTATTTAAG	TGCTTACTAG	AGACATTGAA	TATTCTAAGC	ACCCTGTGAG
TATTATGTAT	TTAATTTGCA	CAATACAGTG	AAGCAGTTAC	TTTATCGTAC
CCATTTTATA	GATGAGAGTG	AACAGTAGAG	AGGTTCTCAT	TTTGATGGTT

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40951 AATATTGTCA ACTTGATTGG ATTTAAGGAT GCAAAGTATT GTTCTCTGGGT  
41001 GTGTCTGTGA GGGTGTGTGA GGGGAGATTA ACATTTGAGC CAGTGGACTG  
41051 GAGAGGAAGA CCCACCCTTA ATCTGGGTGG GCACCATCCC CTTGGCTGCC  
41101 AGCACGGCTA AAAAAAGCAG GCAGAAGAAG GTGGAATGAG CAGACTCGCT  
41151 GAGTCTTCCA GCTTTCATCT TTCTCCCGTG CTGGATGCTT CCTGCCCTCC  
41201 AACATCAGAC TCCAAGTTGT TTAGCTTTTG GACTCTTGGA CTTACACCAG  
41251 TGGTTTGCCA GGGGCTCTCA GACTTTTGGC CACAGTGCAC TGTGCGCTTC  
41301 CCTACGTTTG AGTTTTTGGG ACTTGGGCTG TCTTCTTTGC TCCTCAGCTT  
41351 GCAGATGGCC TATTGTGGGA CACCTTGTGA TCATGTGAGT CAATACTCCT  
41401 TAATAAATTC CTTTTCATAT GTACATCTAT CCTATTAGTT CTGTCTTTCT  
41451 CGAGAGCCCT GACTAATGCA GTCATGGAGG CTGGCGTTTG TACCCAGGGT  
41501 CTCCCAGTCC CCAGGTGCAT GCTCAATGTG ACAGGGCTAG TTAGTGCAAA  
41551 GCCGGCACTA GAATCCAGGT TCTGGATTTT CTTCTTGGTG TTCTTTCTCT  
41601 TAGACTTGGAG GTTTTGAATT GTGTTCTTGA ATCTTTTGGG TCCTAAAAAA  
41651 GTCTTGGGAC CTGCTGCAGG GGTGAGAAG AAGCAAAGCT CATGTGACTC  
41701 TAGGCCCTTA CTCCAAAGTC CAACCAAGTA GCATGCTTTG AGGTAAATTA  
41751 TATTGTGTGA AACTTAATAT ATGATACATA GTATAATGCA ATACTTAATA  
41801 TATATTTAAT ATATTTGTAA CATACAAAAT ACAATATCCA AGAGCAGTAT  
41851 GGAACACCAA AAGGTGTTC AACTTTTTTT TTTGAGACAG TCTCGCTCTG  
41901 TCACCAGGCT GGAGTGTGGT GGTGCAATCT CAGCTCACTG CAACCTCTGC  
41951 CTCCTGGTTC CAAGCAATTC TCCTGCCTCA GCCTCTGAG TAGCTGGGAC  
42001 TACAGGTGCC CACCACCATG CCTGGCTAAT TTTTFTTTGT ATTTTGGTA  
42051 GAGACGGGGT TTCACCATGT TGGCCAGGAC GGTCTCGATC TCTTGACCTC  
42101 GTGATCCACC TGCCTTGGCC TCCCAAAGTA CTGGGATTAC AGGCGTGAGC  
42151 CCCTTCCTTC AAATGGAATT TTATATCTGT GTTTACATTT TCTGCTTAAA  
42201 GTTTGAATTT TGTTTAATTC AATTGAATTT CCACCTAAAA TGTAAACTTT  
42251 TGAAACCCAC ACCTCTGACA TATTCCACAT TGCTGTGGA TATTTTAGT  
42301 TTAAAGATTT GGCCTGTAAG CTGTATCGGT ATCATTATTC TAACTTCAGG  
42351 CTCAAGGTCT CAGTCACTAG TTAAAGTCTT TTCTACCGGC AAATCTGTAT  
42401 TACCATCTAC TGTGGAAGAT AACCTCTAAA GTGCCCATGT AAGCACAAAT  
42451 CCATAAAACT AAAAGTCAAA GAAAAAAGAG AAAGAGTTTA TTCCACTGTT  
42501 TAAAAAGTTCA GTTTGATTTA GATCTTATAT CTCTTGGGTT TTCTTGACTG  
42551 ATTTTTTACA TAAATGTGTC CCAGAAAGAG TGATCATATC GTGATCTTTG  
42601 TTCCCAAGTTT TCCTTTTCCA CATCAAGTTT TCCTGATGGA AAGTGATTTA  
42651 AAAAAACCCT TAAAGTGTGA TAATCACTCT CTTCTTTAGT AGACAGTGGA  
42701 GTTTAATAGA TGCATACAGC AGTTGTTTAC TTGTGATGAA AAGAAATGTG  
42751 AATTTTCTGG TGCAAGGACA TTTCTAGCTC ATGTCTAAAT TGCAGAGAGA  
42801 CCACAGTTTG ACATAGTGCT GAAGCAGGTT GTAAGAGGTA GGGGTACAAT  
42851 GTATGTCTGC ACAGGTTGTG CACTATGCGA CTGTGAATGG TGTCTTCTGG  
42901 AATTTGTCTAT GCGGAAGCAC TGTGAGGAG TCGTGGATTC CAGCCTCTGT  
42951 TGATTTTGTG GCATGGGAGA GCTTGATACC AAGCCTCAAA GTACTAGGAA  
43001 TAAGAAGGTA TTACATGCTG TAATTTTCAA GGTGGTGCCT TTCTGTACCT  
43051 CCATTGCTTT TAGTTTAGGG CATTTCTTCT GCAATCTTTG GAGGGTTCCCT  
43101 AGGAATAAAA AAGTAGCTAG TTTGAGACAG TGTGCAATTG TGCTGAAATG  
43151 GAGGACCATG GGGGTAGATG TAGTTCCTTT CATGCCAGTA GCTAATTGGC  
43201 TTAGTTTGCT GATTTGTTCC AGGATATTCC CTAAAAATAG GTGTCTTCTA  
43251 AGCCTCAGCT TTGGGCCTTG AGGTATGGCA TGGCTATCCG CTCTCTGCTC  
43301 CTGCTGAGCT AAATGCAGTC CTGAATGCCA AATATTGAGA TTTGGAATTA  
43351 TCAAAGGACT ATTAGCATCA AATTGAGAAA CTCAAGCTAA ATTTGCAAAT  
43401 TAATACAAAA TCATGAAGT AGCTTCTCTT CCAGAGAACC TCTTGTAACA  
43451 GAACCTGAAG GTGGCAGGAT GTCTTGATAG AGCGTGGATT TTAGAGCTGG  
43501 ATGCATGCTG GGCTTATATC CTGGTTCCAG CATTGTCCTT GGGCAAGTTA  
43551 TTTACAACTT CTGGTTGAGG TGTTTGACT AGTTGATATC TATGATTCCT  
43601 TTTTAAAGTAA ATAACATTAT GTTTTTTCAT ACAGTATAAT TACTATATAA  
43651 CAAACATCTT CTTCTTTGAT TTCATTCTAT CATTCAAAGT ATTTATTAAA  
43701 TGCCCTCCAA TGCCGGACAC CATACTAGGT ACTGGGTATA TAAGAGTGAA  
43751 CCAAATGAGC AGGGTTTCTG CCCTCAGGGA GTTGATAATC TAGTGGGGAA  
43801 GGTGTTGGGG ATGATGGTTC ATCAATAGTA AAGAAACAAA TAATATAACT  
43851 ACAATCATAC TTGCTGTGAT AGAGAATAAT GGGGAGGACC CTATGTATTA  
43901 GTGGGGGGTA CTCTAGAGAA ACAGAACCAA TAGGATACAA ACACACACAC  
43951 ACACACACAC ACAAATGTGT CTTGGGTATA TATATATCTA TATGAGAGAT  
44001 ATATGTATAT ATGTACATAT GTATGTGTGT GGGGGGGATG GGGGATATAT  
44051 ATATATATAT ATATGGAGAG AGAGAGAGAG ATTTATTTAT TTTAAGAAAT

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44101 TGA CTCACAC AATTATGGAC AGGTCCCAAG ATCTGCAGGT GAGTCAGCAA  
 44151 GCTGGCGACC CAGGAGAGCT GATAGTTTAG TTCCAGTGCA AGTCTGAAGG  
 44201 CCTGAGAAC AGGAAAGCCA ATGGTATAAT TCCCCTGAAA AGCCGATATT  
 44251 TCAGTTCAGG TCCAAAGGCA GGAAGAATTC TCTCTTACTC AGGGGAAGGT  
 44301 CAGCCATTTT GTTCTATTCA GGCCTCCAAC CGATAGGATG TGGACCACCT  
 44351 ATGTCGTGGG AGAAATCTGC TTTACTCACT CTGCTAACTT AAATATGAAT  
 44401 CCCATCAGAA AGCACCTCA CAGAAGTACC CAGAATAATG TTTGACCAA  
 44451 TATCTAAGCA TCCTCTGACA CAGTCAAGTT GTCACATAAA ATGAACTATC  
 44501 CTAGGCTACT TAGAGTAGTC AGAAGATACC TCTCTGACAT GGTAACATTT  
 44551 AAAGTGAGAC CCAAAGAATG GGAAGGAGCC AGCCGTGGAA GAATGGGGGA  
 44601 CAGGCCTTCC AGGCAGAAAG AAAGTGAGTG GTAACCGAGT GGAAACTGAA  
 44651 TGGAACTGG AGTCCAGAGG GAAAAGGGG ATGTTGTGAG ATGAAATTAG  
 44701 AGAGGGGACA GAGGCTTTAC TGTGAGACCT TGAAGCCAT GATAAGGGGC  
 44751 TTGCATTTTA TTCTAGATGC AACGATGAGA GGCACTGAGT TTGAGCACCT  
 44801 TGAAGCCAT GATAAGGGGC TTGCATTTTA TTCTAGATGC AGTGATGAGA  
 44851 GGCACTGAAA AGTTTGAGCA AGGAGGAATG TGAGAGGATT TATGTTTCGA  
 44901 AAAGATTTTT CTGACTGCTC TGTGGGAGTG GGTGAGAGTG GAAAGTGGGG  
 44951 AGACCTGAGA GAAGGCTATG GCTGGAGCCT AGTAGGGAGC AGGTAGCCTG  
 45001 GATGGAGGGC CAGGGGGACA GAGGGAAGTG GATTGTTTGC AGGTCTATTT  
 45051 TGGCGGTAGA AATGAGAGAA CTATTGGGGA GGGACAGGAC AAGAGAACAG  
 45101 AAAGTAAGGC TGCTCTCAG GATCCTGCCT ATTTGGCTTG AACGGTTTGG  
 45151 GTGAACATTA CTATCATTCG GGGAGGTGAG ACTTCCTTTT TTGGTTGGGT  
 45201 CAACTAACAA GCGCAATTTT CACTTACTAA GCATGAGACA CACCTGAGGT  
 45251 ATCCAAATGA AACTCAATAG TAGGCAATTG GGTGTGTGAA GCTGGAGTTC  
 45301 CAAGGACATT TTGGGTCTGG GTGTATAGAC CTGGGAGCCA TCAGCATGTA  
 45351 GGTAGGGATT ACACAGGGAG AGGATATAGA ACAAAGGGG TGCAGAAAAT  
 45401 AACCCACGGA AGTCCAGTGT TTAGGCAGAA GAAGAAGTAT CTGCAGAGTG  
 45451 GATTTAAAAA GACCCAACGA GAGAGGGTGG AGGAAAGCCT TGAGAGTGTG  
 45501 ATATCACAGA GGCTGTAAGC AGGGAGCTTT TTAAGAAGGA GCAAGTTCTC  
 45551 CTGTGCAGAA TATTGCTGAG AGGACAAGTG ATGTGTGGCC GTGTGGGTGT  
 45601 CCCTGTGTG GGTAGCAGAG ATCGTTAGCA GAGCAGTTTC AGTGGAGTGA  
 45651 CAGGAGAGGA AGACAGTAG ATTTTATGCA GTTTTAGGAT GGGTATCACC  
 45701 CAGTGTATTA GTCCATTTTC ACGCTGCTGA TAAAGACATA ACCAAGACCG  
 45751 GGAAGGAGAG GTTTAATTGG ACTTACAGTT CCGCATGGCT GGGGAGGCC  
 45801 CAGAATCATG GTGGGAGGTG AAAGGCACTT CTTACATGGC AGCAGCAAGA  
 45851 GAAAATGAGG AAGAAGCAAA AGTGGAACC CCTGATAAAC CCATCAGATC  
 45901 TCATGAGACT TATTCGTTAT CATGAGAATA TCATGGGAAA GACTGGCCCC  
 45951 CATGATTCAT TACCTCCCC CTGGGTTCCT CCCACAACAC ATGGGAATTC  
 46001 TGGGAGATAC AGTTCAAGTT GAGACTTGGG TGGGAACACA GCCAAATCAT  
 46051 ATCACCAGT TTAGTACTTC ACTATGTTTT TGCCCAATTA TGTGGGTAG  
 46101 GGGATGGTTG TGCTCCTCCT GTCCCTTACC TTAGAGCTGG CAGATAAAAT  
 46151 ACCAGATATC CAGTTAAATT TGAATTTTCA AAAACTTTTT AAAAAAGTAT  
 46201 AAGTATATCC CAAATATTGC ATGGGATATA CTTACCCTTT AAAAAATTTA  
 46251 TTGCTATTGT TTAATCTGCA TTCAAATTTT ACTGGGTGTC CTGTATTTTT  
 46301 GTTTCCTGAA TCTGGTAGCA CACATTGAAT TGCACCCTTT AAAATGGCTA  
 46351 GAATAGGGAA TTTTATGTTA TGTGCATTGT AACACACACA CACACACACA  
 46401 CACACACACA CACACACACA CGTATCTGGC AATTCTCCCT TAACATAACT  
 46451 ACCATGTAGA AGCTACCATG CGATGCAGTC TATTTCTAGG TTTAGCCACA  
 46501 AGGGTCAATA AGAAAATCTG ACCTCAAAGG AAATTATGTC TGGTGATGGT  
 46551 TAATGCTTCT ACTAAATTC CTAGAGCAT AGGATGCTGA GCCCATAGTA  
 46601 GGACCTCATC AAATGCTGGT TTGATAGAAA TTGCATTTGG GGAAATTAG  
 46651 CAGCTGTTGA TAACTGAATG GAAAGAAATG AACTACCCTG GTACCTGTGG  
 46701 TACAACTTAA AGAACACCAT GAAATGGGCC TCATGGGAGG TTCTCAATGA  
 46751 ATTCACTGGC GTGGCACTTT TGGGCATGCT TTTGGAACCA AGTACTTACT  
 46801 CCATGTGCCT GTGAGTTTGG CACCTCTCAT GGCAGCCCAA GTGCAACTGG  
 46851 TTTCTGAGGG GCCATTAAAA ATCTCCCAAT GGCAGACAAC TCTCAGACAT  
 46901 GCCTGCAAAAT TCCAAGACAG CCAGGCTGAT CATCTGCTAC TTTAATTGGT  
 46951 TATACAGTT TTTATGCCTT TGTTTCTCCT CCTTTCTGTG AGGTGGAGGA  
 47001 AACATAACCA CAAGACTGTT TCCAGTGACC TCTTCAGAGG CAATTTCCAA  
 47051 GCAATTAAAT ATGGGTGAA TCCAAAGTGT ATTGATGAAT TAAATCTGT  
 47101 TCCTTGCTG AAGATTCTGT TCCTTGCTG ACACCTGAAC TCAAAGGTTA  
 47151 GATTGAAC TA TAGGAAAA CGGTTTTTCT CTGTGTTTTT CCTGCAGGCT  
 47201 TTGCTGTTTA CGAAGATCTT GCATCAACAC TTAGCATTCA CTCACATGGC

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47251 AAGCTTGCAT GTGGTACTTT CATTCCACAT TAATTTAGGG AACTCTACTA  
47301 TGTGCCAGCA TTCAATATCC AATTTGTCTT AGATTTTCGA ATAGTGTCCC  
47351 ACAATTTTAT AACTGGGGAG TTCCTTGAAT GGAAATATGT TCACAGTGGC  
47401 TGCTTAATTG TGACTAACCC ATCACATAGA GACTGCTTTG GTAATAGATT  
47451 TGATTCTGAG GGTCTAGGAG AAGGGACACT TCTCATATGG GGAAGACGGG  
47501 ATTAATCCTT GAAAATGATA CTGAAGCCAA CTCTGTACC AGTATAGCAG  
47551 CTTAGCAGAC TTGCTAATGA TCCATGTAAG GGTCTGTTTG CTCTCTGAGA  
47601 TTTTGGGTGC CTTCTCTAGC CCCTGAGTGC TGGGCTTCTT CTGAATTCCA  
47651 TAGGGGTGGA GGTGAAGGTA CCGCCAGCTC TCACCCAACT CATCCATCCC  
47701 TGGACAGCAG GGATTCTGCT CATCACCTTG GTGCCTCCGA TGCCTGAAGC  
47751 ACAATAGGCC CTCAGCAAAC ATTTGTTGAA TTCATGCCAT GAACATTAAT  
47801 CGAGCCCTTT TTATACACTG TGCACTGGGA TTGGGACCAT GGAAAATTTA  
47851 GAGAGGAAAA GGTCCACCTT CAAGGGGCAT CTAGAGGAAC TTATCCTCTA  
47901 GCAGGAGAAA TTGCTAATGA GAAAAGGTAT TTTGGGGAGT GGAGTGAGGT  
47951 GTTGGTCTAG CTGGCAGGTT CAGCCTATGC TCAGTGGCTC TCTGGTATGG  
48001 AAAATTCCTC AGAATGTTGA TTCAGCCAAA GATTTCTCTG GCAGCACTGA  
48051 CTCTTGCCTT CTTTCGGCCA CATTTTATTC CCCAAACCTA GGTGTTACTG  
48101 GGAAGAGACT GAGCTGTTTT ATTGAAGATA ATTGACTTTC CCAGTTTTTA  
48151 AGTAAGTCTG TTGATTCCCTC GAAGACTTCA CTAATCAGAG TTATGAATAT  
48201 TTCAAAAACA CTTCCCAGTC TTCAGATGAA TGGATTTGTA GGTTTTCTAC  
48251 ATTGCTGTCT CCCTAGCCCC ATGAGGAATA ATGTGGGTAT CCTTTTCCCT  
48301 TTTAGGTTTC TCTCTTCTC TAACCTGCGC CCACTCCCAG CCTCTGATAG  
48351 ATGCATTTGC AGTAAATCAC AGAAATGTTG CTGATGTCAG CAGCACTGAT  
48401 ATGCATTAGA GGAGCCACTT CAGAGGAAAT TACTCAGAGG GTGATGCTGA  
48451 AATGCAAAGC TGTTTGGTAG GGTATTTTGT AGAACTGTT TTCTCCCTTT  
48501 GATGGATCTT GTTTATTTTT TTTTGACTTA GTAGGCACAG TGAAGGAATA  
48551 ACCATCCAAA TGTTTTTTTT TTTTCCATTT AAGTTTGTGA TAGGAGGTTT  
48601 TGGTGACTTT GAAATGAACC AGGAGCACTG AGCAGCTACA CTGACAAATG  
48651 GAGATGGCTG AGGCTGCTTG CAAAGCAGTG TGTGGGGTG TGGAGCCTCC  
48701 ATGTCAGTGA CCTGGGGAAA GGCAACAGTG AGGGCACACC TCATTCTACA  
48751 GAAATGGTTT AAAAATATAC ATATGATACC CCACTTTTGA TGCACACAGA  
48801 CTGTGCTGTT TAAATGCTTT CGATGGAAAA TCCTTTTGTA AAGTACACGT  
48851 CTATCTTGCA GAGTAGGATT TCTGTATATG ATCTCAGGTT TGTTTATAGG  
48901 GAGGTACACT TGGATGTCTT CATGACATTT ATCATGACAG CTGTAGCTGA  
48951 GCAGAGAAAG AGGGCAGGAC TGCCATGGGG CATCAAGGGC CATTGAAGA  
49001 AGGAAATGGT GGAATGAGAG TGATAGCGAC CTGTGAGGCT GCCTGGTTTC  
49051 TGTAGCAGTG TTCAGCAGCC TGTGACTCTG AGCAGAGAGA AGGAATATTA  
49101 TACAGGGATA TTTCCAGGTA GCTCCAGGAA AAGACAAAAG GGGAGGAAGT  
49151 TGAGTCTGTT AGCTAAAGAG CAGTGTGAA TATGGGATCC AAGTTGGGTG  
49201 GAGAAGAGAA AGCAACACA GGGAGGGTAG GATGACAGGA GAAAGTAGAG  
49251 GCAGGGTATG ATGTGGGAGC GATGAGGGTA GCAAGCTGGA AAGAGAGGAT  
49301 GATCTAGTCA ATGTCTTAGT GTGCCCTTAGG GCTACTATAA TGAAATACCA  
49351 TAGACTGAGT AGCTTTTGCA CAACAGAAAT TTATTTCTCA TGGTCTGGA  
49401 GGCTGGGAAG ATCAAGATAT CAAGGCAGAT TCAGTGTCTG GCAAGGATCT  
49451 GGTACCTGAT TGACAGACAG CTGTCTTCCT GCTGTGTCCT CACTCGGTGG  
49501 AAGGACCAAG AGATCTCTCT GGGTTCTCTT TTATAAGGGC ATGAATCCAA  
49551 TTCATGAGGG CTCAGCCCTC ACCATCTAAT CACCCCCCAA AGCCCCACC  
49601 TCCTAATCCC ATCACATTGA GGGTTAGATT TCAGTGTGTG AATTTTGGGG  
49651 GACACAAAAA TTCAGACCGT AGCAGTAATC GCTTCAACTG AGTATTGAGA  
49701 CAGTTCTTGT GGTAAACAAG TTAGGGTGT GGCCATAGGG AGACTCAGCT  
49751 GTAGTGGAGC TGTTGGGGCT GTGCCAAGGT CACCCAGATC CGTTTTGTTC  
49801 TGTGCACCTG TCCTTTAGCT TCTGGGGGCT TCTCTCTTTC TGGCCTGTAC  
49851 CTACAGCCTT TTTCAAGGA CTCTCCTTGG TCTACCGGAG CCTATTTTCA  
49901 GGATGTTCTT AGGAGTTTTT TGAGATGGAG TCTCCCTCTG TCGCCCAGGC  
49951 TGGAGTGCAG CGGCACAATC TCAGCTCACT CCAACCTCCA CCTCCTAGGT  
50001 TCAAGCCATT CTCAGCCTC AGCCTCCCAA GTAGCTTAGA TTACAAGCAT  
50051 GCACCACTAT GCCTGGCTAA TTTTTTTTTT TTTTTTTTTT TTTGTATTTT  
50101 TAGCAGAGCT GGGACTTCGC CATGTTGGCC AGGCTGGTCT CAAACTCCTG  
50151 ACCTCAGGTG ATCCCCTGCC TCGGCCTCAC AAAGTGCTGG GATGACAAGC  
50201 ATGAGCCACT GCGCTGGCC ATCCTAGGAG TTTGTATCAC CCACTCCTTC  
50251 ACGGTTTGTC TGGAGGGATC TCCTAAATAA ATAACCTACA AACAAATTCT  
50301 CATCCGGGAT CTGCTTCTGG GATACCTGCC CTGAGTTAGT GGTGAGATG  
50351 GAATGGAGAT GATGGCAATG GTGATAAATT CAAGGAAATG GGAGGCTTGG

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50401 GTCTTGGCTG GGTGTGTGT GGGATGCTGA AGTCACTTAG GAGGGAAACA  
50451 GGACCCAGAG AGAAGGCTGC AGGAAACTGG GGGAGCAGCC AGGTCTACCA  
50501 CTGATGGCCA CGGGGAAAGA GTAGGAAGTG GAGGAGCCAG AGGGCTGGGG  
50551 TCTCAGAGGA ACTGTCGGGT TTGACACAAG AATTTGGGGT ATTGGTTTTC  
50601 CAGGACAATG TGACCTGAT GTTGTGGGCG AGGGAGACTG AACAGCCCCT  
50651 ACCCCAGAGT CACACTGACA GCACAGTGTC CTCAGGGAAA GCCCAGGTAT  
50701 CAGGAGAAAA GGCGCAGGAA GGGGCCCTGA AGAGGCTGGG GGCATGAGGG  
50751 AGTCTTCAGA TCTTCAGCAG GGGCCCCTGA GGCATCTTTG GAATGGTTTG  
50801 GGGTAGGGGT GAGGGGAAGG TTGGATCAGA GGGGAGGAGG CTGAGAGCAG  
50851 AAGAGAGAAC AAAGCTACAC CAAGTGGCCT CACTGGCCTC ACACTTCTCA  
50901 GAATTGGTCC CTTTCAGACCC GGTGGTGGGT GGCTTGGCAG CCTGGATGTG  
50951 GGGTGTGGAG ATTGGTACTA CTCTGGCAC ACAGGGGGCA TGCATTGGTT  
51001 GAATAAACAA ATGAATGACA CATCAAGTTT GTAGATGCC CACCTTTTCA  
51051 TCATTCTGAA CCATTGTCAC TTCCATGTAT TTTATGGTCT GATAAATATG  
51101 GAATTAATCG AAGTACCTCT AGCTATTTGT TATCACCATT ATTGGGTGGG  
51151 ACACAGCGAA CAGATTTCTT AAAGCTAGGG AATTATGCAA TAGGACATGT  
51201 TACGGACTTA AGCCATAAGA TCCTTTT TTTT TTTT TTTT TTTT TTTT  
51251 TTTAGATAGA GTCTCACTCT GTCACCCAGG CTAAAGTGCA GTGGTGCAAT  
51301 GTCGACTCAC TGCAACCTCC TCCTCCCAAT TCTCCTGCCT CAGCCTCCTG  
51351 AGTAGCTGGA ATTACAGCGT GCGCCACCAT GCCTGGCTAA TTTTGTATT  
51401 TTTAGTAGAG ACAGGGTTT GGCATGTTGG CCAGGCTGGT TTGGAAAGGA  
51451 TCTTTCTAAT AGGCCAAAA ATATTTTCA GTTTTGCTTT CTA CTGTGGA  
51501 TCTGTAGATC CACAGTATAA CTACTTATGG TCTATTGCT TGTGATTGCA  
51551 GATACTGAAG GAGTTTGTG GGAAGGGAGA AGTGTGTGTG GAAGAAGAGG  
51601 GGAGGGCTGG AGAAGTGAGA TGAGCCCTGA GCACACGGGA CATTGGAGGC  
51651 CAGGGAAAGA ACCATGGCGG TGCTTGTTGA GTTTTAATAG GTGCAAGCTG  
51701 GGAATTTTCA AAGGCTCAC TGGCTGCTGA GTGGAGCCTA GGGCAGGGTG  
51751 GGGGGTGGGG GGAGACCCCT CCGGGAGCCA GTGAGGAGAG ATA ACTGCTT  
51801 TTGACAAGAC ACCTGGGAAA GACATCTGGA AGGAATGGCG TTGACAATAA  
51851 GATTTAAAC CCTTGGCCCC AGGGAAAGGG GATATTTTGA GAACTATGAC  
51901 TGCTTGTATT ACTTTTAATC CCAAGAGGAG GATAAAGGTC TTTCTGTAT  
51951 AAAGTGCGCT AGTTAATTTA AATTGTGGAG GAAAAACTT AGGGCAAGAG  
52001 ACAGAATATG ATATTTCAGG AGCATTTTGG AAAAAAGACAC AAGGAACCCC  
52051 AGCTGTGGCT GTGTGCACCT TTAGGGCCTT GATCATGGAG GCAGGATAAA  
52101 GAAGTCCATC TCGTCAACAT GGCGGAGTCA GAGTCTATTG GGAGAATCAC  
52151 GAGGTAGGCA GCTCTAAATC CCAAAGATG GTGGTCCAGT CGGATATGCC  
52201 TGGGCTGCTC TGACCAGCTC AGCACACACA AGGAATAGCT CTGGTCCTGG  
52251 GCAATTTGTG CCCTGGGTG GAGGGTGAGA GTTTATTTTA TC GGAACAAT  
52301 AAAGGCATCC CACCTGCTAC CAGGAGCAAC CAAAAATGCT CAGAAGTTCT  
52351 GGAACAGGAG TGCTGTTGAA CAGGGTTTCC TGGCAGCCCG AGATAGAAAG  
52401 TGGTAAAAAC AGCAAAATGC TGCTATGGTA TAGTACTGAA GTCATCAGGC  
52451 ACACACTGAG ACTTCCTGTG GGT CAGGCCT TGTGAATGGT GCTGGAGACA  
52501 GAGACTGGGA TAAGATCTAC CATCTCTGAT GCTGACGCCC AGCCAGTTT  
52551 TCCCCTTTTT CTCTCTAGTT TTTTCTTTCT CTGT CATGCA TCCCCCTCCC  
52601 TTTGCTGTCC CTTAAATGTT GCTCCCTTGA GCATCATCTT TTA CTCTCTT  
52651 CTCATTTTAC ATCTCCCTCT GGACCCTT ATCCAGTCCT GTGGCTTCAG  
52701 TACCACTTAC ATACTCATCA CTCTTAAATC TAGGGATTCA GCTAGATTAT  
52751 TCCCCTGAGT TCTGGTCCCT TATGCCTCAT GTTAACTGGA TAGCTCCACC  
52801 TGGATGGGCT ACAGGAGCTG CACACCTAAC TCTCCTGCAT TTTCTGTCTT  
52851 GCAGAGCATG ATACTGTTAT AAGCTTATAA GAGTCATCCC AGACGCTCC  
52901 TTTCTTCCTT TGCATCCATC ACTAGGACCC GCACATTTTA CTTCCTTAAC  
52951 ACGCCTTGTC TGTGACTCCT CCTCTGCTGC TGCCTGAGTT GAGGCCTCAT  
53001 AATACATTCC AGTAAACTCC TACCCACACC CCCCACAGAC GATCTCTCAC  
53051 TTGCTGCATG TCTCTTACGC ACTGCTGCCA GAGTCAGCTT GCTAAACCCA  
53101 GGTCTGACCC CCTGGCTCTT CTCCCTGTGT TAGCCTTGAT GGCTTCCCAC  
53151 GCTCATTAAT AAGACCAACA AGAGCCACAC TCTCTCCTCT GCTTGTCTTT  
53201 GCAGCTTTAT TTTGGTGTAG CCATCTTCAC ACCCTCTAGT CCTGACACGC  
53251 AGACCTGAGG TAATTTCCCA AATGCCCCAG GCTGATTCAT GGCTGAGTGT  
53301 CTTTGTATCT GTTGCCCCC CATTGCTGTT CCGCCTTCCT CTCCACCTCC  
53351 TTCTGCCCTC TCGCAGACAC CTAATGCCCT TTCCACACCA GTGGGACCT  
53401 TGTCTTTGCA TTCTCGTCTC CTCTTCGGTG GCACTGACAC TCTCTCTTCA  
53451 TGTCTTTCTG TCCCCACAC CTCTGTCAAA CACAGCATCT GCACGCTTTG  
53501 TTGCATTGTC TTGCATAGAA CACGTAGTTT TCTTCACCTC CTAATAATGT

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53551 GGACAGCTCA CGTTGATTGA GGA CTGCTT TGAACAAGGC ATTGAGCAAC  
53601 ATGCCGTACA TTTTATGTTA AATCTTCCCA ATAGTGCTAC TGCTTCTGTC  
53651 CCTTTCCAGG GAGGAGGAAG GAGGCTTGA GAAGGGACTG TCTTTTAGGA  
53701 GCCCTGCCCA GTGTTTCTCG TGGAGGGTGG GGCCATCGTG GAAGACAGAC  
53751 CTATGGTAGG GGTAAGCTGG GTGGCTGTTG AAGTCCAACC TTCCCCCTTC  
53801 TTCCTCTAAC CCTGATAACC TTGTCTCTG GGGCCTGTCT GCTAGTGGAG  
53851 AGGCTTCTGA CTTTTTTTTT TTTTGTGCCA TACCTTTGGT TTATAAATAC  
53901 AAGAAGAGAT TTGGGGGAAA ATCAGGGGAA ACTGTGAGC TTACAAGTCC  
53951 CGAGAAGGAA GTCAGTCTC CTTTAAGTCT CATGTGAACC CCTTGTTCTC  
54001 TCCCCAGCTT GTGGGGTGAA AGAAAAGCCC TTAGTCTTT TGGGTCCTCA  
54051 AATCACAGTT TATGCAGTTT GGCCCCAGTC AGAGGGACCC CAGGAAGGCA  
54101 GACTCAGGGT AAATCTGCCC TGTCTTCCAC CAGAGAGGGG ACTCACCAG  
54151 TGTGACTCAT GCCATTCAAT AGAATTTTAA AAATCTCACA AGTATTTTGT  
54201 ACCCTTGAAT AAAAGAGAGG CTTGTAGCTC TTCATGAAGG AACAAGAAAG  
54251 GCCCGAAGTG AGTGTGTTGA GCCCAGTGAA GTAAAATACT GCCCTGTCTC  
54301 TTGTCTGTCC ACTCTAGCGC TTGTACAAAC CATGAAGAAC TCTCTTTGGA  
54351 CTGTTTGCTT TTTGAGAAATG TTAACACCTT GACTCTGGAT TTCTGCCTAT  
54401 GGGAAAAAAC CACAATAGTG CCAGGGGTGC TTCCATATGC AGGATTAAC  
54451 CTGCAGTCAA AGTTTCTGTT GGGCAGGTGT GTGAACTTGA TATCATAAAT  
54501 GCTGGCCCAA AGCAAATGGG AGAATGGATG AATGAACAAA TTCAGGAATG  
54551 AAACAAACTG TAACAGAGGG TCTCCTAGTT GTAGGTCTC TGCTAAACTT  
54601 CATATTGAGA CACAAAGGAA GGCATCTTA TAATATAATG TTGGGGGATG  
54651 AGCAGTCAGC TTGGAGGTGG GGACACGTAA GGTGGGTTTT GATGTTTGAG  
54701 AAGGAATTGA CCAAAAAAAG AGTCAAGAGG TGAGAAGAAT CTGGGAAGTG  
54751 AGACCTGTTT CTCTGGGACA GGTGTGAGCG GGTCTGGGTG CTGCTGGGT  
54801 TGGCTGGGGC AAAGGTTGCT TGTGGGGGCG TGGCAGTGGG TGAGGCCTGT  
54851 GAGATAGGCA GGCGCCAGGT CCTGGAAGGG AGAGTCAGGG AGCAAGGCAT  
54901 GGAGCCTGCA CTTTACTCTG AATGTTGGTG GCGCCTTCAG AGCATTGTTA  
54951 GCAGGGGTCC ATGTGATCAC ACTGACACCT GAGAGAGTGA CACACCATGT  
55001 ACATGGCTGG TATATGGAGG ATGGATTTAA GGGGGACAGG ACTGAAGGCT  
55051 GTCGAGTGA TTCAGGTGAG AGAAGATGGG GTTCTGGAAT AAGGGACAG  
55101 GAAAGCACAG ATGTGAGATG AGGTGGCAGG CAGTTCTAGC TCCCTCTTCC  
55151 CCCAGTCTG CCTTGTTTTC CTCTTCTCAT GGCTCCATAG GGTCTCAGTC  
55201 ATTTTCATCAT AGCTTGATCT CTTCCATCTG GAAGTGACAG CTGAAATTTT  
55251 GAAGACAGCA GGGAGCAATG CTTACCCCAA AGGGAGAGCC TCGGGTGGCG  
55301 TTTTGGGACC ATGGCTTGCT CTCTTAGTGC ATACAGACTT AGTGTACTG  
55351 CCATCTTTAC TGGGATCAGC TTGATTGCCA TTAAGGTAGG GCTGTCCATG  
55401 GAAACAGGGA AAACATGATT TGGTTGTTTG GGTATCTGGA ACCAGAGGCA  
55451 GCACAGATA TGCTCTAAGA GCTGCTGGGA CAACTGGAGG CCGGTGTGGG  
55501 TGGAGCACCC CAGGTGGAAT CCTGCGCTCC TCATCTTCC TGCCCTCTTC  
55551 CTAACACCCCT GCGTCCCGAG CGGCCTGAAG TCTGCCTATG CCTATGCAGG  
55601 CTGAGCTGTA ACCTGGGACT CTTTGGAAGC TCTGAGCCAT CAGTGCAGGT  
55651 GGCCCCGGAA TGATTCCAGA CCTAGAGTAG GGGTGGGAGG TCGGCTGCGG  
55701 GGCGGGGGGA GGTGAGAGGA GGCTGTCTCT TCCCTCTTGC CCGGGAGTCT  
55751 GCAGTCACAG TTGCACCTTG CCTGGGTCAG TAGCAGAGTC ACGCTGCTGT  
55801 GTGACAGTGG CACTGAGGCA GCTGCATTTC AGGTTTCCAA GAGACTCTGA  
55851 ACCCTTGGAA TGCCATTGT TTCAGGTGAC ATGGAGGAAT GGAGGCATC  
55901 GGGTTAAGTG TCTGAAGATG GATTCAAGGA TGCCCCGTCT GTTTAGCTTG  
55951 TCATAGGTTG CTCAGTGTCC CCTCTCTGGC CCGTAGTTTC CTCATCTATC  
56001 AATGGGGGCA GATAATAATC ATCACCTTAC ACAGAAGGTT TGGCGAAGAT  
56051 AAAACAGGTT TCACTGGCTG GGTGCAGTGG CTCATACTTG TAATCCCAGC  
56101 ACTTTAGGAG GTCGATGCTG GCAGGTCGCT TGAGGACAGG AGTTTGAGAC  
56151 CAGCCTGGAC AATGTAGTGA GACCCCATCG CTACAAAATA TTAAAAAATT  
56201 AGTTGGGCAT GGTGGCATAT ATCTGTGGTC CTAGCTACTG GGGAGGCTGG  
56251 GGTGGGAGGA TAGCTCAAGC CAGGAATTCC AGGTTACAGT GAGCTATAAT  
56301 TGTGCCACTG CACTTCAGCC TGAGTGACAG AGCAAGATCC TGTCTCAACC  
56351 AAAACAAAGC AAAACAAAAA CAGCTTCATG CACGTGTAAG ATCTTTGTTA  
56401 ATTCTTCCAT TAACTCTGAA GGCGGGATGC GTCTATTATA TTTATGTAGC  
56451 TCCAGTGCCA AATGCAGTGC CAGGCAAACT CAGTTGTTTG TTGATTGAAC  
56501 GAATGAATGG ATGTGTCAGT AATATCTGTG GGGCTTGAGA AAGCCTGAAT  
56551 AATGTCAACT TATTAAGAGC TTGTCAACC ATGAAAAAGC AGATTTCAC  
56601 ATGTACCCCT CCATATCACC CACATTTAGG TGAAAATGAA ATATGTGCCG  
56651 TATCTTTTTT TTTGAGACAG AATTTATCTC TTGTCACCCA GGCTGGAGTG

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56701 CAATGGCAGC ATCTCGGCTT CACTGCAACC TCCACCTACC TGGTTCAAGT  
56751 GATTCTTCTG CCTCAGCCTC CCGAGTAGCT GGGACTACAG GTGCATGCCA  
56801 CCATGCCCCG CTAATTTTTG TATTTTTAGT AGAGCTGGGG CTTCACCATG  
56851 TTGGCCAGGT TGGTCTCGAA CTCCAGCCT CCAAGTGCT GGGATTACAG  
56901 GTGTGAGCCA CTGCGCCCAG CCATGCAGAT ATTCTTGAGG AAACATTTTA  
56951 AAATGAAAAC TAGCAGAAAAG GATATTACCT TTCAACATT CTCTTCTCAT  
57001 CAATTCTTGG CAGCAGTTT GCTGCCAGT ACTCTTCTGT TGGAGCTGTG  
57051 AAGTGTGATA GGCCATTACT TTATAGATCC ATTCATTATT GATACGTTTT  
57101 GTAGGGAAGA ACTCCACTGC TGTTTGAAA CTGAAGTAGT CAATCTCATA  
57151 GACTGGAAAA TATTTTTAAT GCCTATTTGA AACAAATGTC GTTCCTATTT  
57201 TTTGGGATAA AAGGGCCCTT TCCCCCTGGA ATGCTATGT TTCCTCTTTT  
57251 CCTGTTCCCTA CACTCTGCAG AACTGACTTT GAAGTCAGAT GATTCCCTTT  
57301 TTAATCTGGC TTCTCGCTTT TGGGCCGCTT AACCTTGACT TAGCCATTGA  
57351 ACCTGCTCTGG GTCTCAGTTT CTTTGTCTGT GAAGTGGGGC TGTGTTGGGC  
57401 ATGAGCATGC GCCTACAGGC CTCTAACTGG AGGGGGTGTT GGTGATCAGG  
57451 GCCCTGGCTG CTGCCCTGAT CTCCACAGCT GGGCTTGCAC TCGGGGTACG  
57501 TTGCTCCCCG GCTGCTCCCA GCCAGTGTCT GTGCGCAGCA AGGATACCAC  
57551 GGCAGGATTG TTTCTGGGAG ACACAGGACT CCTCAGACAG CTAACCTCAG  
57601 CTCAAGAACT CTTTGATGGG CTTGCTAAAC TTCCTTAGGC TGAAGATGC  
57651 TTACCTCCTC CTTCTCTCTT TCCTTCCTTT TCCAGGGGTC AGACTTACTT  
57701 AGAGTCTAGT GGCTGTTCTA GCCTCCCAA CTCCCTATCA TTTCTCTCA  
57751 CACATGCGTT CCCCCTAATA AAATCCATGC ACATTTAATC CCTTCTTGGC  
57801 ATCTGCTTCT GGGGGTCTTA CCTGGACTCA TGCAGTGTGA TAATTCCTTG  
57851 TAGTGAGGAC CGAATGTAGT GATGTAAGCA GAGTGTGTGT CAGAGTGACA  
57901 GCATGAGTAA GTGCCAGTA GGCCATCAGG GCTCCTGTCA CCTTCACCAC  
57951 CATCAGCACC ACCATCCTCA TCACCATCTG GCCAAGTTTG CTTCTTTGTT  
58001 GGTTCAGGAC ACGAGAATC CAGTGGTTGA TTCCAGGTCA TGAGGCAACT  
58051 GTATTAGGGT GAGAACAAC GTGGCTTCTA AGGAGAATAA ATGGATTAAT  
58101 GAAAATGCCA TTTAAAAATT TATCCAACCT GGCTGGATGC GGTGGCTTAC  
58151 GTCTGTAATC CCAGCACTTT GGGAGGCTGA GCGGGGAGA TCACCTGAGG  
58201 TCAGGAGCTC AAGATCAGCC TGGCCAGCAT GGTGAAACCC CGTCTCTACT  
58251 AAAAAATACAA AAAATCAGCC GGGCATGGTG GTGCACGCCT GTAGTCCCAG  
58301 CTACTTGGA GGTGAGGCA GGAGAGTAGC TTGAACCCGG GAGGTGGAGG  
58351 TTGCAGTGAG CCGAGATTGT GCCACTGCAC TCCAGCCTGG GCGAGAGAGC  
58401 AAGACTCCGT CTCAAAAAAA AAAAAAGAAA AAGAAAAAGA AAAGAATTTA  
58451 TCCAACCTAA GCACAATCCA GATCCTTTTC TAGCCATTGA GATGTGCAGT  
58501 CTTCTTTGCC AAAACAACCA AGTCCCTTTT TAGTGAAATG CACAAAAGGT  
58551 TTTGTAACAT TCTGAGATCT GTGCCGGTAC TCCTGACAAC TACAAATATA  
58601 CTCAGCCAG TAGACCAGGG CTGCTCATTT GCTGTTCTCTG AGAACCTGT  
58651 GGCAGTTTAG AAAAAAAGAT GGCTGCTATT ATTCACATT CACAGTAAGC  
58701 AAACAGAGAA ACTAAGTGAC AGTTTCGAGG TCATGCTGTC ACTGATGGAT  
58751 TTGGGACTGA AACTCTGGTT TTTGCTCTGG TGCTTTGGAA GCTCAGGCAT  
58801 GGGTGGATTG TGTCAAACCT CTGCCCTAAT GGACAGTCTC TTCGCAAACT  
58851 GGCACCAGGA CCTGGCCTGA AGAGACGTTT CTCAAGCCCA ATTCTGCCCA  
58901 GCCTCAGGGA TGCTAGAAGC TTGGGAAGCA TCCATGATGC AGGTCACTGA  
58951 CGGAGTCCAG CCTCCACTCA CCTCCATGCT CATGCTATTT ATTGCATGTC  
59001 AGCTGATGAG GCTTTAAGCT AATGTTGGTT ACCTGGTGCT GTGGAACATG  
59051 TTCCTTAAGC TGAAGTGGCA GCCCCTGAGG CTGGGAGGGA CTGTGCCTTA  
59101 TCCCCACCAT ACCACACCCC TTTGTGCCCC TTCAGCATT AATAAATGTT  
59151 TGTTTTTGAG AGTGCTGGTG ATTCGGATGG GGCTTTTGTG TGAAGGAATT  
59201 ATCACCACCA CCACCACCAC CACTGGAAAA CAACATTTGC TCTATGCCAG  
59251 GCACTATGCC AAGAAATTGA GATCCAATGA TTAAGAGATG AACTTTCTGA  
59301 CTCCAAGAAG TTGATAGGCT AGTGGGGAAG ATCAGCACGC TGGGCCTGCC  
59351 TGGGAAGAGC CAGGACGACT TCATAGAGGA GGTAGCTTTT GGCTGAGACT  
59401 AAAGAGGATG GGAGTTTTC AGGCAGATGA GGGTGGGGAA GGGGTTACTG  
59451 GCTGAGAGGA CAACACCTGC AAAGGTGTGA AGGTGTGAAC AGAGCACTGC  
59501 TGTGTTTGAG GACCTGCTTT CAGTATTGCT GGAGTGCCAA ACTGTTTGCC  
59551 ATTTGACGCT GCTCATCCAC GTTGTCTGTG TGGTTTGGAT GTGCCAGCAT  
59601 TCCTTCCACC TTATTATCAC TTATTCCACC ATCATTGATT GTCTACCCAC  
59651 CATGTGCCAG GTACTGTGCA GAACACTAGG GGTGCAGAGG TGAGGGGTAG  
59701 ACAGGGTGCC TGCCCTCATG GAGCTTTCAA TCTAATGGGA GTGCTGGACA  
59751 AGGGCACAGG CTGTATCAGC AGCACAGCAC AGTGAGTGCT GGGCAAGGGA  
59801 GATGTATTAG TCTGTTTTCC TGCTGCTAAT AAAGACATAC CCAAGACTGG

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59851 GTAAGTTATA AAGGAAAGAA GTTTAATGGA CTCACAGTTC CATATGGCTA  
59901 GGGAGGCCCTC ACAATCATGG TGGAGGGTAA ATGAGGAGCA AAGTCACATC  
59951 TTACATGGCA GCAGGCAAGA GAGCATGTGC AAGGGAACCC ACCTTTATAA  
60001 AACCATCAGA TCTTGTGAGA CTTATTCACT ATCACGAGAA CAGCACGGGG  
60051 AAAAACCTGC CCCCATGCTT CAATTACCTC CCACGGGGTC ACTCCCCAA  
60101 GATGTAAGGA TTATGGGAAT ACAATTTAAG GTGAGATTTG GGTGGGGACA  
60151 CAGCCAAACC ATATCAGGAA ATCTGAACATA ATGGAGGGCA GATTCATTTT  
60201 CTGGGGCTTC CGTAGCAAAT TGCCACACAT GTAGTGGCTT AAAGCAGCAC  
60251 TAATTTATTA TTGTATGGTT CTGGAAGTCA GAAGTTCAAA ATCAGCCTCA  
60301 CTTGGCCAAA ATCAAAGAGT AAGCAGTACA GGTTCCTTCG GGAGGCTCTA  
60351 GGGGAGGATC CTTCCCTTGC CTTTTCAGC TTCTAGAGGG ACCACATTCC  
60401 TGGGCTCATG GCTGCATCAC TCCAACCTGT GTATCTGTCC TCACATCCCT  
60451 TCTCTCTCTG GCCCTCCTGC TTCTTCTTAA TAAGAACTCT TGTCATTATA  
60501 TTGAGCCCAA CCATATATC CAAGATCATC CCCCATCTCA ACATTCTTAA  
60551 TCACATCTGC AAAGTCCCTT TTGCCATGTA AGATAACATT CATATATGTC  
60601 TTGGGGATTA GGATGTGGAC CTCTTTGTGG GCCATTATTC TACCTGCCCC  
60651 CAAGGCAGGA GGGGAGAAAG TGCTCCAGA AGTGATATTT AATATGAGAT  
60701 TTCTGGCTCA GAAGCAGGAT ACACATGGAA GCAGGGAGGC CCCTTGGGAG  
60751 GCTGCTGGGC TGGTCCAGGC AAGATGTGAC AGTGGCCTGG ATGAGGCTGC  
60801 TGGCCACAGG GGTAGGGAAA GGGCCAAGGG ATGAAATACA GTGATGAGGC  
60851 AGAATGAATG GGAGATGTGG GCAGTGGTAA AAGAAAGCCA CCTTAGGCAA  
60901 GGCTCACCTT CTGGCATCA ACAGGAGCAA GGGGAAAGT GAATGCAGCG  
60951 TCTTTAGGGA AAGGTTAGCA AGAACATAAT GCCCAGGTTG CTGATTCTAA  
61001 CATATAGATC TTTCAATCAA GATTCCAGAC AATTTTGCGT TTGTGTAAAT  
61051 CTGAGGGAAA TTTAACATGG AGTGATTTTA TTGGATTGGA TAATATGCCA  
61101 TAAAAGACTG ACGTTCAGCT CGGTTTCCAA AGACAGAAAC TGATTCCGAG  
61151 GGCCTAGGAG GAGAGGCAGA TGTTTACAAA CTTAGATTCT TCTAAGCCAT  
61201 CACCTCTACA GCCAGGTGTT TTGAACAGGC AGTGACATAG CCTGCTCTTT  
61251 GACTTTTCCA ACAGTGATTG AGCAGTTTAA CTCCCTGCTG GAGTGGGACT  
61301 GTTTACCCCA CTTAGGGTAA TTAGGTTTAT CATCTACTAA TACCTTCTTC  
61351 ACACAACAGC CAGCCTGCAC CATGACAGAG ACTATAATAA GAGTTGGAAT  
61401 AATAAAGGGA GAACAAAACCT GAAGTGCAGT GGCTGTTCTG TGTTGCACAA  
61451 GACATTTCTG TGATGCATGA TAGCATTGCG TGTGCGTCAT AACCCCAAAC  
61501 TTCTTGCCAT CGCAGAAAAG CCTCCAGCTG AACCTATTTA TTTCCAAAGT  
61551 AATGAAATTG CCCTACAGAG AACAGGGACC TTAGAGAATT CTATGTGCTT  
61601 CGAAAACCAG GAAACAGTTT TTTTCCAATG ACGTCTTATT GGAAAACAAT  
61651 AGAAGAAAAA TTCTATTACT AGTAGATCAG GAGTGGTTAT GCCTAAGTCA  
61701 CATCTTCTAT TAAGATATAA CAAGCTCATC CTTTTTTCCT TTGTTTTGTG  
61751 ACAAGAGGAC TTTTAAAGTC TCTAGACATT CATCTCTTCT CTGCTGTTGG  
61801 TATCACCAGC CTTTGGTGCT TGGATAGAGT AGTTGGTTAT CCCTCTCCTA  
61851 TTTACTTCCT CTCCAAGTTC AACAACATGT TTGTTTTTAA ATCTGATGAT  
61901 TTGTTGTATT CCTTACACAT TGTTTCAACA AGGAAGCTAA GGGAGGAGGT  
61951 GAATTATAAA TGGCAGAGAG ATAGCTTTCA ATTTGGACCC TCGTAGAAAA  
62001 ATGTAAGTAT TTCAAACCTCA GTTTTATACCT TTTTTTTTTT TAACTGGGA  
62051 CCCCTGGTGC TTATTTTTTTA GAACTCAAAT GGGTACCTAG CAACTGATCA  
62101 AATTCCTTAA CTGCAGGCTT GGTGAACCAG CGTTTCATCC TCACATTGGA  
62151 AAGCTGGCTC AAAGAAGACA TCTGTGCTTT GTTTCTGACA CGTTTTGTAT  
62201 TTATTTATAA ACAAACTCTC TTCTTCTTTG TCCCCACCC TGACTCCTCA  
62251 GTGGCCGTTT CCGCAGCAGC ACCGGTGTGC CAGCCCAAGA GCGCCACTAA  
62301 CGGGCAACCC CCGGCTCCGG CTCCGACTCC AACTCCGCGC CTGTCCATTT  
62351 CCTCCGAGC CACAGTGGTA GCCAGGATGG AAGGCACCTC CCAAGGGGGC  
62401 TTGCAGACCG TCATGAAGTG GAAGACGGTG GTTGCCATCT TTGTGGTTGT  
62451 GGTGGTCTAC CTTGTCACCT GCGGTCTTGT CTTCCGGGCA TTGGAGCAGC  
62501 CCTTTGAGAG CAGCCAGAAG AATACCATCG CCTTGAGAGG GCGGAATTC  
62551 CTGCGGGATC ATGTCTGTGT GAGCCCCAG GAGCTGGAGA CGTTGATCCA  
62601 GGTGAGCAGG GAGTGAGTCC ATCTTAGGCC AGCTGGTGGG GTGGATGGCA  
62651 GTGTTGGTTT TATCTTTCTG GGTCTCTAGT CTTGCCTTCA GTTGAGAGGC  
62701 TCTTGGTGGT CAGGGAAGTT CTCTCCAGGG AGGTGACATG TGAGCTGAGA  
62751 CCTCCAAGAA GCGATAGTGA GGCATGTGAC AGTGTGGGGG AAGGAGGGTC  
62801 CATGTTCTGC ATCTGGTTTT GGATGAGTGG TCAGAGGCGG CAGCAGGCCA  
62851 ATGGAAGTTG GATTTTCAAG TTCAAGTCCA CCTATGTGTG CTGATTAAGT  
62901 CCTTGATTCT GAACTCTGTG GAATGCTGGG ATAGAACCCG AAGAAGGAAA  
62951 GAATTTTAAA TATGCAGATT TAGAATAAGC AGGGATATAT TAACCTGTCC

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63001 AAGGTCCATG AGGATGAGGT AGAGAAGAGG CCACCAGGTA TGTGGGTGAA  
63051 GAGGCTGTCA GTGGCCTGAG ACAGCTGTTA TAGTGGATTT ATGGGGATGA  
63101 AATAATATGG ATCACAGTAG TAGTAATCAT CAGGTTTGCT GTTTTTGAAT  
63151 ACTTACTGTG TATCAGGCAC TGTACTAAGG CCTTTACATA CCCTGGATAT  
63201 TAAGGAAAAA AGATTCCTAG GAAAATGGAA GCAGAGAACT TGAAGTGCAG  
63251 CCTAAAGAAG CAAGGCAACA CTTCTGGGCG ACAGATGTGG ACTTGGCAGG  
63301 GGTGGACTGT GCGCGTAAGG AGCTATAGGA AAGCCAGAGA GTCATCTGTG  
63351 GGGCTGCGGT GCGAGGGACT GGATCAGGAG GGTGTGAAG TCTGGGAAGC  
63401 CAGAGAGAAA AGCAGTCCCC ACGAGGAAGA AAGGGAAATG GTGGAGAGCC  
63451 CTGTTGGAGG GCTTCACCTT GGACGTGAAG GAGGAAGGCT GCCTCTGAGG  
63501 CTGAAGTTCC ACTTTCTATC CCAGACACCC TCCTGAACCTA CAAAGAGTGG  
63551 GTTTTGGTGG AAGGCGGTGA CATTTATGGA GGTGAGGGAG AGTCTCATCT  
63601 TTCTGGGGGC TCTAAAGTTT GGAAGGTGGA GGGATGGAAA AGACAGCTTT  
63651 TACAATTCCT TCTGGCTCTG GAAGATGCAC ATTAAATCTT AATGGCTGCA  
63701 ACAATCCAAG ATAGTGTAGG ATTTACCAGT CTGCGCTGTT TTCTTATTTA  
63751 TTTATTTCTT ACCATACCAA TAGAGTAGGG GAATTCTGAT GCTGCTTATG  
63801 ATCTGGCACC TTCATAGCAA TCATATTCTT GTCAGTTAGT TTTAATAATG  
63851 ACTTGACTCT TAAATAAATA GAAATACAAA TTCTTCCCTT CTTGGGAGTA  
63901 AATATGATTT CATAGCTATG CCCTATAATT CTTCTCAAAA AAATAAAATG  
63951 TTAAAAATCC AAGGGCAGCA TTTCATATAA GTGTTTCATA GGAAGTCAGT  
64001 TCTCCAAATG GCTTTGTCTT TTTTTTTTTT CTTTTCTTTT TTTGAGACAG  
64051 GGTCTCATTG TGTCACTTAG GCTGGAGTGC AGTGGTGTGA TCATGGCTCA  
64101 TTGCAGGTTT AACTTCCTGA TCGAGGTATC AGCTGATCCT TCTGCCTCAG  
64151 TCTCCTGAGT AGCTGGGACT ACAGGCATGT GCCACCATGC CTGGCTACTT  
64201 TTGTCATTTT TTTGTAGAGA CAGGTTTTCA CCATGTGCCC CAGGCTGGTC  
64251 TTGAATTCCT AGGCTCAAGC AATCAACCCG CTTGGCCTC CTAAAGTGCT  
64301 GGGATTACAG GTGTGAGTCA CCACGCCCAT CCCTTTCTT CTTTCATGGG  
64351 AAAATGCTAC CACATTTGTG GTGATGAGAT TTTTGTACTA ATCAGTGCCA  
64401 GATTTAAAGC CTAGCATGCT ATAGAGAATG GAATAAACAA TTCTGGAGTA  
64451 GTTTTAAGTA GGAGTATAAT TACATTTATA CACATTGTTG TGATATGAGG  
64501 TAGGATCCTT TTTAATTAGT TGTAAGACAC GTCATAATAA CCTGATAGGC  
64551 GTTCTGAAGT GAATCTAGTA TTGTGTTTGA ATTTTCCCTC ATTAGGCAGT  
64601 AAGATCTTGA AGAAAAGGAA TGCACGTGTG TACCTTTTCC TCCACATGTG  
64651 ACCTATGCTT TGCTTTGCCCT CTAATTATTG CCCATTAGAT AAATGTTTTT  
64701 AGAGCAAGAT ATCAAAGCAA ATTGTAGAAC ACTGGTGATG TCACAAGCTA  
64751 TCTGAGCTTA TCCATGCATT TGTTGATTAA TTCGGCATTT CCGTATTGCC  
64801 CATTTCTTAA CCCTCATCTT TATGAGAGAG CTCAGAGACC TGAATGAAGG  
64851 ACAGGGTCAG AGAGCGTGGA GGTCCCTTAT CTGATGCTGC CATTAGACT  
64901 GGTGTCCTGT TTTGACCTCA AAGATTTCTC TGTGAAATGA GATATGTGTG  
64951 TGTATGTGTG CGTTTGTGTG AATGTGTTTG CACATACACA CGTGTGTGCA  
65001 TTTAAGATAA TTTTATAACA ATTTAAAAAG CTGCTCTTTA TTAGGCATCT  
65051 GTTATGAGCT GGGCATCATA TACCCATTAT CTCATTTAAT CTTATCAACA  
65101 AACTCTAAG TTCATATCAC GATTCCCATT TTACAGGGGA GGAAACATCA  
65151 GTTTCCTTAA AGAGGTGAGT AACTTTCCAA CCACCAAAGT GGTAGAGCTG  
65201 GTAGTCAGCG CAAGGTTGGA CTGACTGTAC ACTCTCTCAT CCAAATAGTC  
65251 TACAGGCCCT TTAAGTAGAT CTTGGTTTAT AATAAGCTCC AGTCTCTTTT  
65301 AAACCTGTGA TTTATGTTGA ATGCTGTATT AGTCCATTCT CACTATAAAG  
65351 AACTATCTGA GACTAAGCAA TTTATAAAGA AAAGAGGTTT AATTGATTCA  
65401 CAGTTCGCGA GGCTGTGCAG GAAGCATGGC TTGGGAGGCT TCAGGAAACT  
65451 TACAATCATG GCAGAAGACG AAGGGGAGGC AGGCATGTCC TATATGGCTG  
65501 GAGCAGGAGG AAGAGAGAGC AAAGGGAGGG ATGCTACACA CTTTTAAACA  
65551 ACCATATCTT GGCTGGGCGC GGTGGCTTAC ACCTGTAATC CCAGCACTTT  
65601 GGGAGGCCAA GGTGGGTGGA TGACCTGAGA TCAGGAGTTC GAGACCAACC  
65651 TGGCCAACAT GGTGAACCC CATCTCTACC TAAAATACAA AAATTAGCCA  
65701 GCGGTGGTGG TGTGCACCTG TGGTCCCAGC TACTAGGGAG GCTGAGGCAG  
65751 AAGAATTGCT TGAACCTGGG AGGCAGAGGT TGCAGTGAGC CGAGATCATG  
65801 CCACTGCACT CCAGCCTAGG CATCAGAGCA TGACTCTCTC AAAACAAAAA  
65851 CAAAAACAAA AAGCCAAACA AACAGATTTC ATGAGAACTC ACTCACTATC  
65901 ACAAGAACAG CAAGAGGGAA ATCTGCCCCC ACCATACCCC TTCTCCTACA  
65951 CTGGGGATTA CAATCAACA TGAGATTTGG GCAGGGACAT AAATCCAAAC  
66001 CATATCAGAC ACTTTCCAGA ATTTTAGCAG TCAAAAAGCA TTAGATGGCC  
66051 AGGTGTGGTG GTTCATGCTG GTAATCCAG CAGCTTGGGG GGCCAAGGCG  
66101 GATGGATTGC TTGAGCCAG CAGTTCGAGA CCAGTCTGGA CAACATGGCA

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66151 AAACCCCTTTT GTACAAAAAG TTACAAAAAT TAGATGGGTG TGGTGGCACA  
66201 CGCCTGAAGT CCCAGCTACT TGGGAGGCTG AGGTGGGAGG ATCACCTGAG  
66251 CCCGGGAAGT CAAGGCTGCA GTGAGCCATG ATTGTGCCAC AGTACTCCAG  
66301 CCTGGGAAAC AGAGTGAGAC CTTGTCTCAG TAAGTAAATC ATTAGAGTTC  
66351 CTGGCTGCCT AACAGGAAGC ATTTCTGTTT CTTCTCCCTA TGCACATTGA  
66401 GCATCAGTCC TGGACCTGGG ATGCTTTTAG ATCTCCATCT ACTATGACTT  
66451 ACAGATTCAT CCTTGTGTTT ATCTACAGTC TTTCTCACAA TATAAGTTAA  
66501 GCAGGTTTAA CTGCTGAATC TGTGTCAAAT CATTGCACCA AATCATTACA  
66551 TTTTGCCCTT CAGTTCACGT ATACCTTCAC AAGGATGAAA GTGTCCACTC  
66601 TTACAGACCA GGGAGCTTTC TCACACTTTA TGCCTCTGAG CAGCACTGTA  
66651 TGTAGCGATC ACAAGAAACA CAGTATTTAA AAATAGTCTG TTTTCACATC  
66701 TGGAAGGGTT TTCAGTGTGC TGTGTTTAA GTTGAAAGA TAGTACTATT  
66751 GTATCTCACC CAAGTCTGAA AGGAGTGACT GGAGAGTAGA AAGTAGATGG  
66801 AAAGTATTTA TTTTCATGAT TCTCTTGGCT GGATTGAGTG AACCCCTCAT  
66851 AAAGCCAAGC TGAATGTGT GCTTCATATT ATTAATAACC AAAATAGAGT  
66901 ATCCAGAGAA GCATGATACC CTCAAATGC CTGGATAGCC TAGAAGAGCC  
66951 TTAGCTCTTA CAGCCATCGT GGGGAGGGAT TTTCCAACAA GTAAGACCAC  
67001 TTCATGGGGT ACTGTGGGAC TCCAGAGGAG AGTAATGGGC CACTATCCCT  
67051 AAAGGTGAAG AAAGATGGGT TGCTGTTATG AAGGGGACAT TCTCATCCAT  
67101 TCATTTAGTC ATTCATTCAT CTATCCATCC ATCCACTTGT TCTCAGAATT  
67151 GCTGCTGAAC TCCTGCATGT ATCAGGTAAC ATGCCAGGTG TTGGGGAGAG  
67201 AAAGAAGAAG ACACGGCCCG GTTCGGTGGC TCACGCCTGT AATCCCACCA  
67251 CTGTGGGAGG CCGAGTCAAG CGGATCACGA TGTGAGGAGT TTGAGACCAG  
67301 CCTGACCAAC ATGGTGAAAC CCTGTCTCTA CTAAAAATAC AAAAATTAGC  
67351 TGGCGTGGT GGCAGGTGCC TGTAATCCCA GCCACTCAGG AGGCTGAGGC  
67401 AGGAGAGTTG CTTGAACCTG GGAGGCGGAG GTTACAGTGA GCTGAGATGG  
67451 TGCCATTGCA CTCCAGCCTG GGCAAGAGAA TGAGACTCCG TCTCGAAAAA  
67501 AAAAAAAAAA AAGACTCACC ATAAGCAAAGT TACTCACCTC TTGTTTCTTC  
67551 ATCAATAGAA TGTGGCCTCA GGGTGCTGAG AGGATTAAAT GCAGTAATTC  
67601 ATGAGAAAGG CTTTGAACGT TGCTTGGCAC ACGGTAAATG CTCACAAAAG  
67651 GATTATTATT GCTGCTTCTA TTGCTGCTAC TGTTCTTTAT ATTATTCAGG  
67701 GAGCTCAGAT TTTCAAGCAG TGTTCTTAA TGGGATGGGG TGGGGTCACC  
67751 GGGGAGGGGA TGGTTGCCTC TAGGGGGCAT TTGGCAATGT CCGGAGACAT  
67801 TTTTGGTTGT TACAGTTGGG GAGGTGCTAT AGACATCTAG TGGGTAGAGG  
67851 CCAGGGTTGC TGCTAGACAT CCTACAATGC ACAGCATAGA CCCCCCTCC  
67901 CACAAAGAAT TATCCAGTTC AACATGCTCA TAGGTTGAGA AGCACTGGAG  
67951 GAAGAGGCAT GTAAGCCAAT AATTACAATC TTTTGGAATA GAGCTATCTG  
68001 AAAGACGTCC AAAAAATGGA GCCCTAGTGA GGCAAATAGA GCTCAGAGAA  
68051 TATTTTGTGG TTATTTATCT CCTTCAGTCC CCACAGCTGT TCTGTGAGGA  
68101 TAATCTTTGG TGCCACATA CAGACGAGGA AATGAGGCAT CAGGAGCTGA  
68151 AATGATGGCT TAAGTTTACC TGGTTAGAAA TGGAGGATCC AGGGTTTACT  
68201 GCCAGGCAGT CTGACCACAT ATCCCAGGCT CTGAACCACC ATGCACTGGA  
68251 ACAGAAACAC GATATCTGGG AGGGATTCTT TGGGTAGGCC ATGGTTGGAG  
68301 GGTATCCCAA TGCTGGCAT GTGGCCCATG GGAAAATGCT AACAAGTTTG  
68351 TGGTGACAAG AATGTTATAC TAATCAGTTC CAGATTGAGG GCATTGAAAG  
68401 TGATCAGAAT GGCTTGAAC TGAAGTATG AGAGTACGTG GAAATGAGAC  
68451 TGGGAAGGGG ATCTGTGGAG CTGGGCTGAG GAGGTGCTTA GAGGACCTTT  
68501 ATGTTGTGGA ATGTCGAGTC ACTGAAAGCT TTAAGCGAGG CTTGGAAGAT  
68551 GGAAATTGGC TGCTGAAAAA ACCTTTTAGC AATGAGGAAG TTGGGTTGGA  
68601 GGAAGGAGAA ACGGGAAGAA GGAAGACCAG TTAGAATGTT GCAACATCAC  
68651 AGGTGAGGGA TGCTGAGAGA TAGAGAAAAG GCTATATTTA AGAAAGTTGA  
68701 CAGAGAAAAC TTGAAAATTA CTCAAACCTG ACTCAGCAA GATTTCCTGCT  
68751 ATGTGCTGCA TATCCCTGCA TGGCCTGTAG CCCCCAAGAC TCGGGGGTTA  
68801 ATCTCCCCAC GTTAAATCCT ATACCACTTA ATGAGCTGAG TGAATTGGGC  
68851 AAATATCATG TTGCCCCGGC CTCACTGCTC TTCTGTGAAA TGGAGATTGC  
68901 GATCACGGTG TCTACCTGTT AGACACTATG GTGGTCTGAG GATTAAACAA  
68951 AAGAAGCTCA GTAACTTTGA GCTCTTGTTA TTGCTGCTGC TTATTTGTTA  
69001 GGAAGGAAG AAAAAAGAA ACCAGAAAAC TCCTAACTGA TGCGCATCGT  
69051 GGAGTTCTCTG TGAGGGAAAA GAGAAGAAGG TGTCTGAAAT GACTCTTGGG  
69101 CTTCAAACTC TGAGTTTCT CATAGAAAAA TTTTATTTCT ACTGTTCAAG  
69151 TGCAGAGTGC CCATCACAGA AGTCGCTCCC AGAGTGCTAG GCTGGGCTGC  
69201 TCACACCATG ATGCTCTGTC TTTGTGGCTT GAGCTCAGGG AATCAGCACA  
69251 GCAAGTTGCT ATTCCATTGA GAGGGTTTAC TGTGGGCATC TAGAATGTCA

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69301 TCTTTATCCT TCGTCTTACT GGAGACTGTC AGTCTCACAT TTATTAAGTA  
69351 GACACTAGGG CCGGCTCCAC TGATCTCTCT CCCCCTGCT TCTCTGGTTT  
69401 GAGGCACAGT TTCAGAGAAC CTGAGGGACC CGGTGGGCTC AGGCGGCCCTC  
69451 AAAGCAGCAG GTCACCTGAC CAGTGGAGTG ACCACAGATT CCAAGGTGTG  
69501 ACCGAGTGAA AGGGCTTATA TCCCAATGC CTGACTGCAG TTAAACCCTA  
69551 ATGAGGTATG TGGATCTTCT AGAGGAAGGG CCAGGCCCTT TTAATAAGGA  
69601 CCCTTCTGAA CAAAGAGACA AGATGCTAAT CCGAATTCCA CTAGGACCAA  
69651 GTTTGATGTC CTAGGGCCAG CCGCTTAACC CGAGCTGGGG CTCAGCAGTT  
69701 AAGCACATAG AGGACACAAA AGATGCATCC GTCTCTAGAA TCTTACCCTT  
69751 GAGATGTGAG GGAGTGTGCA GACGATTGTA AATGGGTAAC TTCCTGCAGA  
69801 GCTGGTGTAA TAATAAAATA TAGCTACCAC TTAGTGATTG TTTACTTTCC  
69851 TCTAGACTCT GTTCTAAGTG CTTGAATCCT CTAGCTCATT TAACTCTTGC  
69901 AAGAAGCCTA CAAAGTAGGT ACTTTTTTTT ATTCCTTTTT TTTAAACAG  
69951 GGTCTTGCTC TCTTACCAC ACTGGAGTGC AGTGGTGCAA TCATGGTTCA  
70001 CTGTAGCCTG GAACTCCTAG GCTCAAGCAA TCCTCCTGCC TCAGCCTCCT  
70051 CAGAACGTTT CTGGGGGTAG GTTGGTCCAA TCCCCTCAGA GTGAGCAGGT  
70101 TATCTCACTC CCTGGAAGGC TGGCTTCTCC CCTGCCTCTC TTCGGTGCTT  
70151 GCCTCCAGCA AGTTACTGAA GTCCTCAGAG GCCTCTCCAC CGTGAAATGG  
70201 ACACTGTCTG TCTGTGGGAC TACAGGTGGA TACCACCAGA CCCAGCTAAT  
70251 TTTTAATTTT TTTTTTTTTT TTGGTAGAGA CAGGGTCTCA CTGTGTTGCT  
70301 CGTGCTGGTC TGAACTCCTT GGCTCAAGC AATCCTCCCA CCTCAGCCTC  
70351 CCAAAGTGCT GATATTACAG GTTTGAGGCA CCATGCCCAG TCTGAAGTAG  
70401 GTTCAATCAT CATCTCATTT TATGGATGAG GAAATAAATC CCAAGAAGTT  
70451 AAATAACTTG TCCAAGTCCA GACAGCCAAT AAGTGATTAA ACTTGGATTT  
70501 GAGCCCTGGG AAGCCAGACT CCAGAGCCCA CAACTGAA CCCTTGCGCC  
70551 ATACTGCTTA CTTGCATCAA TGGTGAGTAT CCCCTCACTA ATATGTAGAC  
70601 CTCTTCATAA AGCTTTTACT CCAAGGAAA GGCTGGAGGG AGAAGGAAAC  
70651 ATGATTCAAG AAACCTGGCT GTCTGGCATG GTGCTATAGC ACTCCACGTG  
70701 GGGAATATTG TGTTTTCAA GAAAGGGTGT GTTAGAAGGG GAATGATCAT  
70751 GGACGTTATA TCAGATAGAC TTGGTCCCTC AACACCACTA AACCTAAGGC  
70801 CCTCCTCAT ATTAAAGGGA TCACAGTCCT CATTAGGATG ATTTGGGGGA  
70851 GTGAGTGAAC CTAGCAGAGT GCCTGGCATG TCACTGGCAT CAGGAAATGC  
70901 TATTTCTTTC TCCACCCCGT CTTTCTTCTC TCAAGCGAAC TGAGTAGACA  
70951 AAGATAATTA TACCTGGAGT ACTTGCAATT CTTTGGCAGT AGAATAAAGT  
71001 AAATTAAATG TATTTTTGAA GTTGAGGTTT CCATGAACTT GATTTGGCGG  
71051 TCACTGTGTC CCAAGAAAGC CTTTATCTTT GACGTCCTCA CATGCCGCAA  
71101 TTGCTTATCT CCTGTTCCTC AGTGCAATG TCTTAGAAGC TTCTATACTG  
71151 ACTAGTCTTG GAGAAAGCCA TAAACATTC CTCTTTTGTG ATCCTCAAAG  
71201 AATAAAATCG TGAGGAGCCT TCGCTGACTG ACGGGGAAGT GTAGAATGAA  
71251 TGCTTCGGTT TGCAGGGATG ATCATTGGCA GCAGTCTTTT TTCAGGTTAT  
71301 GAATTTCTGAT GTTTCCAGTA TGTTTGAAGA TTTTGAGTGT CTTTCAGGGGA  
71351 GCTCGAGTGG TCCCATGGCT GCCATTTCTT CTGGTCATAG CCTCGCTGAA  
71401 GGGAAATAGCA TTTCACGGGA GTGGGTTTAG GGTGAGTGA GGCACCCATC  
71451 GGGAAGGACA TGGGATTTTT CATTCTAAGT GCCTTGCCAT AAAGCAAACG  
71501 ACAGGGGTCT ATTCCTCTCT CTCTGGAGAA TGTTTCTGGG GGCAGGTTGG  
71551 TCTAATCCCC TCAGAGTGAG CAGGTTATCT CACTCCCTGG TAGGCTGCCT  
71601 TCTTCTTGG TCACTTCAG TCCTTGCCCTC CAGCAAGAGG GGTCTCTCCA  
71651 ATGCAAAATG GTCACGTGCT GTTCATGATA GTTTTTCTGT CTGAAGAAAG  
71701 TCCCGGGGCC TTCATCTGCA TGGCTGGGGC TAGGTCTGGA ACTGCCTGGA  
71751 GCATGAGCCT TTTGGGGGGT CTCTTCCAC CTGCTTTGTC TCTCTCTCTC  
71801 TCTCCCCCTC ACCCTGACTG GTCCAGTGAC TCTTTATGTT GGTGAACAGA  
71851 AACTTTACCA TTGGTTTTCA CTTTATGACG TCTATGGGCT TCCCCTCTCT  
71901 GCCCCCAAGA TGGCGTCTCA CTCTGTTGCC CAGACTGGAG TGCAATGGTG  
71951 AGATCTTAGC TCACTGCAAC CTCTGCCTCC TGGATTCAAG TGATTCTCCT  
72001 GCCTCAGCCT CCCAAGTAGC AGGGATTACA GGCTACTTCA CCACCCAGC  
72051 TAATTTTTGT ATTTTATGTA GAGACAGGT GTTGCCAGGT TGGCCAGACT  
72101 GGTCTCAAAC TCCTGACCTC AGGTGATCTG CCCACCTCAG CCTCCCGAAG  
72151 TTTTGGGATT ACAGGTGTGA GCCACTGTGC CGGCTAAGGA TTTTTTTTTT  
72201 AATCCTTTCC AAATAGAGTT TCAGATACTT TGCTCAGTAC TGTGTTTGAT  
72251 GAGTATTATT TGGCAAGATT TATTATTTTT TCATTAAAAA ATTAATAAATG  
72301 ACCTATAATA ATTGTATGTA TTTATGAGGT ACCTCGTGAT GTTTCATAC  
72351 CTACAATGTA TGATGATCAG ATCCGGGAAA TTAGCATATT CATCATCTCA  
72401 AACATTTATC ATTTCTTTGT GTTGGGAACG TTCAATATCC TCCTTTTAGC

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75601 TAAGCCAGAA ATTAAGAGAG TAATGGAAAT TGGCATGCCA CTGGAAAATG  
75651 AATTTGCAAA TGAGAATTCA ATGTTCTAAA AAAACTCCCA TAAAAATAAA  
75701 ACCAAAACCC AGAAGTGAAT GTCCTGTGA CTGCATTTTT TTCCAAATGT  
75751 GCATGGGTTT GTTCTCCTTT AGAGTGTGGC TGTATACATT ATGGAATAAT  
75801 GAGATTTTGA TGGTGTCTCG TTCTTACAAT TGCTCTTATT ACTTATCACA  
75851 ATACAATGTA TTCATTTATA TAACTAATAT TTACTTAGTA CCTATAATGA  
75901 AGCAGGTGCT ATGTTTGGCT CTAGCGATTA AAAACAATA AAAAATGCAA  
75951 GATGCCTCCA CCCTGTCTCT AGGGAGCTTG AGGTTCAGTA TTAATTATAT  
76001 CGCTAGCCAA TTCTGGCATG GTGCTTACTG TGGACAGGAA CTGCTCTAAA  
76051 TGCTTCACGT GTAGTAATCT ATTTAAATTT TACATTGATC CTATGAAGTG  
76101 GGGTAAGCAA CAGAGGAACA GAGAAGTTAA ATAACCTGCC CAAGCTGAAG  
76151 TGAGAGGTGG AACTGTGATC CGGCCAAGGC AGTCCGGCTC TAGAATCCAT  
76201 GGTTTTTAGC CATGATGCTC TACTCTAGTG GATAGTTACA GCCCAGTAGC  
76251 TATTGGTTAC TAGATTGGTT CTAGAAGACA AGGAAGCACT CAGGTCTTAA  
76301 GTCACAGAGC AGGAGTCTCT GACTCAACCT ATGGGACCCC CAAGAGGACC  
76351 TTCATTACCC TGTGAGTCAA CTGCAGAGAG TCGTGATTAC CTCCTGGTTG  
76401 TCCTTTAGAG TGGCAGGGCT TTGTGTCTTA ACATAAGGTG TTGAAGCTGG  
76451 GTCACCCTTT TCGATCTAAA ACCAATGTCC ATGGGTATATC ATTCAGGTCT  
76501 GCAATTAAGA GTAGCTTGTC ACTTTATATT GGGAACATTT ATTTTCTCTT  
76551 CCTTCTCTAT GGAAATGGGC AGAAGAGATG AAAAGCCTGC TGGTGCAGCT  
76601 TAACCTTCCCT CAGTAAGTGA GTGTTTAACC TTTTGTFTTT TTAATAATGG  
76651 AGATGAGACA TACAAATTAT GACTTCTCTA TGTGTCTCTT TTTTGTAGTT  
76701 GGAAGAAGGT GACATGACAG ATGAGCTTTA GAAAAATGTT TAGAAGGTGA  
76751 ACAGAGAAGT ATTCGTGGAA GATAGGAGGC TAGAGTTAAA AGAGAGGACT  
76801 TTTAACCAGT CTCAGCTCTG ACACCTCCTA ACTACTATAA CCTCACAGGA  
76851 TTTTGTGAGG ACTAAATAGG ATAATAAGGC GGAGTCTGCC ACATTGCAAG  
76901 TGCTGGCAGC TATGATTAAT TTTAGGAGTA TTCTAGAACT TTCCCTGAAG  
76951 TTTCTAGCAT TGTCTGCAC TCTTGTCTTC TCCCCTTATC AAACATATGCT  
77001 CAGGGAGATT TGGTGACTCA TTCTTAAGGA GGCACAGAAA ATGATTTTTT  
77051 TTTTTTTTGG CACAGAATCT TGTTCTGTAA AGGGCAGTCT TGCTCTGTGG  
77101 AGGCTGGAGT AAAGTAGCAC GATCATGGCT TACTGCAGCC TCTGCTTCCT  
77151 GGGCTCCAAC GATCCTCCCA CCTGAACCTC CCGAGTGGCT AGGACTACAG  
77201 GCATGCACCA CCATACCTGT GTAATTTTTG TATTTTTTGT AGAGATGGGA  
77251 TTTTGCCATG TTGCCCAGGC TGGCCTTGAA CTCCTGCGCT CAAGCAATCC  
77301 TCCTGTCTCA GCCTCCCAAA GTATGGGGAT TATTGGCATG AACTACCATG  
77351 CCCAGCTGGA AATGAAATCT TAATTTGTGA TTAATATTGA TCACTCAAAA  
77401 GCAACAAAGA GCCCTAAGGT AAATAGCTAC AATAAAAGCA AGATAGCAGA  
77451 AGCCTCTCTT TTTTCATGATG TTATTAATCA TCTAAATATT AAATTCAGG  
77501 CTCTGTTCAA TGCAATGGCA ATGGAAGGAA TAGTAACCTT CCATTTAGTG  
77551 CACAGTGTA TGAATCAGAA TTCTTGAGC TGCTTTTGTA TGCCAGTACA  
77601 GTTTTTTAAA AATAGAAATT GGATAGACCC ATTTTTAATG GGAATGATCT  
77651 CAAGTGCAGA GAGAGCAAGG CATATATCAG ACACTCTCCT CAGGACCAGG  
77701 GCAATTTTTT AACATCAGTT GGCAAATTTG TTATTCTGCC TGTAGAGTGT  
77751 AAGTCCAAAC TGAGATGAAA GAGTGACAGC TTGTTAGTCT GAAAGTTTAT  
77801 TGATCATATC AAAGTATACA CATCTATCCC TGATTCTCTA GTGGACTTGA  
77851 TACTTTCCTC GTGGTTTAAA ATTTGTCTTA TTTCATCCTT CCATGTAGTC  
77901 AAAGAGAGAC AGAGGAAATG CATTTTCCAT CATAAGGCAC AATTTGGAAG  
77951 CTACAAGAGT GCCCCCAAA ATGGCCTGGT CTCATAAGAT AATATTTAGA  
78001 TAGATTAGTC GTTAGTGAAT ACCCAAGGG CTAATGAATT GAGTCTCAGA  
78051 AATCCCATT GTAAGGGATT AACTTGATG AGCAAGGAAA GCTAGCGTGT  
78101 CTAAGACCAT ACGCCATGAG CAAGCATGCT AGCCCATCCT GGGTTTCTCT  
78151 CTCCTCTTCT CCAACAGAT TCTCCACTTG CCCTGTCTT TCTGCCAGTG  
78201 GCCTTCACTT TAGATTTATA ACTAGGCTGT AAAGTTCTAA TGAAAACCTG  
78251 CTGCCTGGCT CCCTGAGGAC CTGAGGAAAG GCTAATATTT GCACATAACT  
78301 GGGTACTTAG GGCAGTAGGA AAATACACGT CATTGTAATA TCCACCACAG  
78351 CACTGAAGGT GCCTCTTTCT TTACCTTTTT ATGGTCTGGT CTGCTTTTTA  
78401 TGAGGGACTC TGAGGTGGTG TGGCAGTTAG GAAGGCCACT TGATTGGGGC  
78451 GTGTCCACTC AGGTCAGCCC AGGCTTGACT GCCATATTGG CTGTGTCTGG  
78501 GTGGGAGGTA AAGGCACAGC TGGCTCAGCC TGCATTCTCT TCCCTTCGTC  
78551 CTATTGCAGG TAGCTGGGTG TCCCAGGCTG GGTGTGAGCC AGCCTGCCCT  
78601 TCCCAGATGT GGGAGCTGT GCGTCTGAGA TAGAGAAAAA AGAACTCAAG  
78651 GTAGAGAGAA GCGCCTTTGC AGAGTTCAGG ATGGTGAAC TCTGTGTGAC  
78701 AATTCTAAGA GCATTGTTTG CTAGCTTTGC TGCGCACCAG ATGTGTACTG

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78751 TACACACAGC ACTTTACCAT TCTCAGTGTC ATGAGTCCCT TGGGGGCAGC  
78801 AGTGTGCCCC ACTGTACTAG GTCCTCACCA GGGCTGAGTT AATCTGTACT  
78851 CTAGGAAGTG CTCCGAAAGG GTTCCTGTTA CTAATACTCC TGAATAAGAA  
78901 ATGACAAGGC ACAGTGCCTG AAGTCTTATG TTCATTTTTTA GACAACTCTG  
78951 ACAACAACCT TGTATGGAAG GTATTAGTCC TCATTTTATA GATGAGGAAA  
79001 TCAAGGTTCA GAGAAGCTGA ACAGCTTGCA AGGCTGAATG GTTACCGCTT  
79051 TATCCAAGAA CTTTCCCTGT TGCAAGAGTA ATGTATGAGG TGCTCCCACT  
79101 GTCTTCTCTC GCACTGAATC CAAGACATCT CTGAATCAGC CACAAAAGTG  
79151 CCTCACTGGG TGTGGCCCCA GAAATCCTCT CTGAGACCCT CCCATGGTTG  
79201 TTTGAAATAT TGTGAACCTA CCTTGCCCTT GGAAGATTCA CTGTGTGGC  
79251 TGTGGAATAT TTATATGTGA AATACTTCTG AAGCAGGTGA AAGAAAAAGT  
79301 AATTGTGGCA AGCAAATTA AATTGTCTT TCCACTTCAA ACCCGAGGCT  
79351 CTTCCGCCAT AAATGTGTGA GGAGGTGGAG AGATGTGCT GCCCTGCTGC  
79401 TGGGGTTTTG AATCCATTAG GGCATTTTGT AGTAGTAATG AATGTGGTCT  
79451 GCCAGTTGCC TTTCTCACAG AGTTTGTGGC TTTCTCCCA ACTGCTAATG  
79501 GCTGGAATAG GCTCCCTTTT TTTTTTTTTT TTTTTTTTTC TGAGACGGAG  
79551 TCTCGCTCTG TCCCCCAGGC TGGAGTGCAG TGGCGCGATC TGGGCTCACC  
79601 GCAAGCTCAG CCTCCCTGGT TCATGCCATT CTCCTGCCTC AGCCTCCCAG  
79651 GTAGCTGGGA CTACAGGCGC CCGCCACCAT CCTGGCTAAC ACGGTGAAAC  
79701 CCCGTCTCTA CTAATAATAG GCTCACTTTT AATACATTTT AGAAACCACT  
79751 TTCCACATTC ATGCCCTCAT CCTGCCTCAA TCCCTGGCTA AATCTCCAAT  
79801 TCATAATCCC TTTGCTGACT GTGCCGTTCA GGGAGTAAGA ACGTGGTGGA  
79851 CGCAGCCACC ATTGTACCCT CAGATGAAGT CCTTTCTCGA GAGACAAACA  
79901 GTCGTGTAGT AAAATGACCA TACATCCTGG GTTGCACCTG TCCTGTGGTC  
79951 CCAGCATAGC TGTTAACAGA GCTACCTTTT TATTTGCAAG TTCCCTGCTT  
80001 TGGACAATAG ATCAACTGGT CATCCAGCTA TTAGCGTCCA TGCATAAAGC  
80051 ACGAATCTGT TGTATTCTTC AGCCAATCTG AGACAACCAA GAGATTACTG  
80101 CTGCACCTTT GTTTGTCTTT CTTTTTGGTG GCACATAAGG AAACAGAGAA  
80151 ACAGATGATC TCACCGAGTG CACAGATCAT AGGAGAAAAG CCACAGACAG  
80201 TTAGTGGTCC CCTGTGGGTC ATCATTTCATC CCAGTGCAGC ACTAACGCTC  
80251 ATGATGGTAT CGCACGCTGT CTGGAGCAGT GATTTCATGTA GCTGGCGTTG  
80301 CCTGATGGGA GGAAACTGGT GGGGAAAACG TGGTGGGGGG TCCTGTGAGG  
80351 GGTCCAGTTA CCTCCTCCTC CTCTCTTTCT AAGCGCATCA GCTACAGACC  
80401 CGCCTCACTT TGTGAGAGGT TGCAGTTTCT CTCTTCTGCC TGTGAGGTAG  
80451 TCCTAATGCA TGGTGTGGGG GAGGGAGGAC AAGGGAGAAA GAGGGGCACA  
80501 GAATCTTTTA GATCCTGCCC TCTTTCAAGT CAGCTCTCCA CCTCTTTTTA  
80551 AAAGAAACAA ATCATTATTA TTTTGTGTGT TTTGTTGAGT TGCTTTTGTG  
80601 TTTGTCTAAT TTTAGAAAAG AGTAAAATGT TTTCTCTCTA CACCTCTGGG  
80651 AAGATAATAT ATCTAAATTT ATTAGTTTAG TTTGTTTATT TATTTATTGT  
80701 TAACTTAAAA CATTCACTCC CGTGCCATTT ACTGGGTAGC TGAGTGGGTG  
80751 CTGGAAATGC CAGCTTAGAG GCTAAAAAGG AAATTCAAGG AGGAATGGAA  
80801 TTAATAATGTA AAGTAATGCC CTCTTATCTA CAGTATCCCC TCGTATCTAA  
80851 TTATCTGTCT ACCTCTATTG AATTATCTGC CTGTGTGAAT TTTTGTATCC  
80901 TTGTAAGATC TCTCTGAAC TGAATAATGT TGAACCTGTA AGTGAACAAA  
80951 TGATGCTCAC TGAGTCTGAA ATTATTAAAT AACATTGGTT GAACCTCTAC  
81001 CCTGTAACAT CTTTGTAGCT AAAGTGTTC GAGCTCAGTT GTGCCATTTT  
81051 ATCATCTGTG TGCTCATACA TTCTAATGGG CTGCCCTCCA TTCACTCTG  
81101 CAGCCTGAAT GCAGGTAATT TTTTCTTTTT TTTTGTGAGA CAGAGTCTCA  
81151 CTCTGTGCCC CAGGCTGGAG TGCAGTAGCG CGATCTCGGC TCACTGCAAG  
81201 CTCCACCTCC CAGGTTACAG CCATTCTCCT GCCTCAGCCT CCCGAGTAGC  
81251 TGGGACTACA GCGCCCGCCA CCACGCCTGG CTAATATTTT TGTATTTTAA  
81301 GTAGAGATGG GGTTCACCA TGTTAGGCAG GATGGCCTCA AACTCCTGAC  
81351 CTTGTGATCC ACCTGCCTTG GCCTCCCAA GTGCTGGGAT TACAGGCATG  
81401 AGCCACCGTG CCCGCTGAG AAAAATCTTA AAAGCAAATG CATTTAATTT  
81451 TAAAATGTTT TACTTGAGCT CAAACAATTA AGATCATTTT AAAATACTTC  
81501 GAAAATTAAT AAAAATTAGA ACTGTAAACT CAATTAGAAT TATTATTATT  
81551 GAGTTAAAAA TGATGTTGCC AATTCAAATG GTAACGTCAG TTATAACCCG  
81601 AGTTTGTCTG TTCATTTGAA TTCTGGTTGT TTGCCAGAGT TTTTCAGAGT  
81651 CATAAGATCC AGATAGAAAA TCAAACCTCA TTCTCAGCAT TGGGGCTTTC  
81701 TAAAGCCTTG TCAGAAATTT GGTGACTCGT GGGAGAGCTT ATTTTCTCC  
81751 TTTTCATTGA GTCTGTCTCT CAAGGAGTTA GTTCAGATCA TCAGTGGCCC  
81801 TACTTTGCCC ATAACAAGCC TTATGTATAA TTTCCACAAA ACTGCTTCCC  
81851 CAGGGCATTT GGGTGCATTG GCCATTTTAC TGAAGATTG GCAGGGAGAG

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81901 AGGAATTGAC GTCACAGATA GAACCCAGCT GAAATTGGAT ACTAGATGGA
81951 GTTGCTCTTC AAAGACTTGG GCATTGCCGC TACGGAGCCT GAATTTCCCA
82001 CCTGTCAAGT GACACCCCTT TTTGTCGCTT TATTTCTTCT TGTCCTCCTT
82051 TTTCAGGGCT TTTCCTTTT CTCTGATCCT TCCCTCTTAG GGTATAAAAA
82101 TCAACCTTTT CCTACTTTAA TTAATTTATT CTTTAATTTT ATTTTAACAC
82151 AGAGCGACTC ATCTCTAATC AGCTTCAACA GCCAAGTGAA GTTTGGTGTG
82201 TCCATTTGCA TGTTCAAGGA AGTAGTCTAA TTAGAAATGA TCTCTCGTGA
82251 GGTCTCTTCT GCCTAAATTC TGGGACAATG GCTATCCTCC TTCTCATCT
82301 GTCTGGAGGT GAAGATGGGA GTAGGGGAGG CAACATGCAT TCTAGGTACC
82351 AAAGGTAGAG GAAAGGCAAA ACCATCCGCT TTGGGCCAGA CAGGGTTGAA
82401 TCCTGGCCTC TCACTTCCTT GGCTGGGTGA CCTAGGACAA GTTAATTAAG
82451 TTCTCTGAGC CTGTTTCCCC ATCTCTAAGG TGGGGGATAA TACTACTTTC
82501 TTGCAAGTTA TGGAAAGGAT AGAATGGAAT CACACACAAG TTGTAGAAAG
82551 GATAAAACAG AATGACGCTT CTAGTGCACC TGGCGAAAGG CAGGCACTTA
82601 ACAACTGTTA GTTCCCTTTT CCTTTCAACT GATAAACACT TTCCTTGAGG
82651 GTTACATAGG TAAACATTAA ATATTTATGA ATTGCATAAT TCAAGAAAAA
82701 TGAACTTGA AAAGGATTCT TCAGATTTT TGATGAAACA AATCATCGTC
82751 CCCATTGTCT TTTGTGCAAA TCTGTGTTT TGTTTGCACT GCTGGGTTTG
82801 CTTATGACAT TTGTGTGCAA TTCTCAGCAC CGTGAGACTT GAGTGAGCCT
82851 AACCTCTCTT CACAGCTTGA TAGGAGTTGT AAATATTAGG TACTGATGGT
82901 ATGATTTGAG GCAACCTAAG TGACTGAAGC CTAGAGCCCT CCCTGCGGTA
82951 TTATTTCCAA GTGGGCTCAT CAGAGCTGAA TTGATAATGA AGATATAAAC
83001 ACTGGTGAAG GCTTTGTGGC TTGGTCTGAT GGTACTCATA CGGCACAGTG
83051 AAAATGGAGA TGTACCGGT GGAAAGGACT CACCATCTGT CTGCCCTCTA
83101 GAGCAGAGCG GAACATACCT CTGATGATTA TGTGACCACT GTCAATTAGG
83151 CTGATTTATG CAAAGACAGT CTGTACACAT CCCATGCAGC CAGATTTTAA
83201 ATTTAGGGT GCCAGGTTTT GCTAGAAACA GTGGCCGGCT GCGGTCTTGC
83251 ATAATATTCC ATGTTCTCTT AGAGGCAGAA AAGAATAGAC TCACGACTTG
83301 ACAGAAGGTG CTTTTTTCCC CTGTATCATC CAGTCAATTG TCTATGAGTC
83351 TGCCAAATCT AGCTCGCAGC ATCTTTTTGT ACAACCCCTG AGCTGAAAAT
83401 GGTTTTTGCA TATTTAAAG ATTATTTAAA AAAAGAAAAA TATCCAACAG
83451 AGACCCATAT GTGGCCACC AGGGCTAAAA TATTTACTAT CTGACCCTTT
83501 ATGGAAAAAG TTGTTGATCC CTGGTTCAGA GTGTTTGAAA TAACTCAGAT
83551 GAAAGAAGGC AAAATGTAAT GATGATTGAC TTTTCCAGTT GTAATCTGAT
83601 TTGTGACAAC CACTGTATGC CTGTTTTAAC AAAGCTTAAT GGGCATTACT
83651 TAGGATAAAT GTAATTACGT TTCAATATTT GTGTCTTGCT CTCCCTACAT
83701 AGGGTTATTC CAGGTTTGCC CAAGGAACAG AGAGTCTGTT TGTTGTCTTA
83751 GAAGTAGCTC CTGTGTCTGT CACCTCCTCT CCAAGGCTTC CACCTGTCGC
83801 TTTTTTATCC CAGTTCACCC GTGTGAACAG CATGTGTTTC GGCTGCCATG
83851 ACAGCACGTC CTACCTTTTT CCCTGGCTTG AAAGAAGATG GCAGGGGCCA
83901 GCTCAGGAAG AACTGCTACG GAGTTTTTTC ACCTTCTCCT GCTCGTGATG
83951 AGGCTAGGGA GGGATTTTTA GCGTATCTTT AATTGTTGCC GAAGTATGAA
84001 CTCGGGGAAG GGGCAACTG TGAAGCAGTG ATGCATAGAC TAAGTCTCCT
84051 GGAAGAAGCA GGGCTTGAAT TAGACCCAGA AGGATGGGCA CCGTTTGTGG
84101 GAGGGCACAG GTACATAAGT ACAGGGAACA TGTCATGGAG TGTCCTGCCC
84151 AGAGTGGGGA ATTTATAGCA GTGTGAGATG AAAATGGGTC ATCATTGTGG
84201 CCAGTTTGTG GGAATTTTAA AGGTGTATGG AATTCCAATT CAGTTATCAT
84251 CAAGGAGTCA TTGTAGCTTA TTTTAAAAA GAGCGATGTG TGTGTGTGTG
84301 GTGTGGGGGT GGGGAGAGT GGAATGACAA TCATGAAATT GGCTACTGTT
84351 TGGTAAACCC TAACTGGGAG CCAGACATTT GGCTAAGGGT GTTACTTGGA
84401 CCATCTCATT TAATCCTCAC AACAACCCTG TGGGGAAGGT ATTATCTCTA
84451 GTTTGCAAAAT GAGGAAACTA GGCTCAGAGA GGTTCAACA ACTTGCCCAA
84501 GGTTCCTGAG TTAATAACGG CCACAGCCAG GATGGCTCTT AACTCCTGCC
84551 CTGTGGAAC AAGCTCAACG TAAAAATTC TTACAAGACA GAAAAGAGTG
84601 AAAAAGCAAC CAAAATCCTG CCTTGCGGAA ATGCCCACTT TGGGTGAACA
84651 TTCTTCTAGA CATTTTTTGT GTGTGTATAT GCACAGAAAC TTGTAACATT
84701 TTGCATAATC TGGGCCACCC CATGCCTGCA AGCTTCTCTAT AAATGTACC
84751 ATATTCTATA TCCTAGCGTT TCCCCCTAT TTAACACTAA TTTTCTGATT
84801 TTCACAACTG GTGCATAGT ATTTTGCTTT GGGATGCTAC CATCATCCAC
84851 TTAACCAAGT CTCTCATAGT CACTGCAGGT TCTTGAGTAG GGGAATAATG
84901 TATTGGAACC TTTTTTTTTT TGAAGAAAAA AAAAATAAAC AACTTTTAAA
84951 CTGAGTCTTA TGCTTTTTCC CTTTCTTTGC AGCATGCTCT TGATGCTGAC
85001 AATGCGGGAG TCAGTCCAAT AGGAAACTCT TCCAACAACA GCAGCCACTG

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85051	GGACCTCGGC	AGTGCCTTTT	TCTTTGCTGG	AACTGTCATT	ACGACCATAG
85101	GTACCCGTTT	GTTTGCTAAT	ATCTCTTCCT	CTGCAGGTCA	TCTTGAGTAA
85151	GGGCGCTTAG	TCAGTGTTTT	GTCCTCATAG	CATACACTAT	AGTTTGAGGT
85201	TCAGAGGAGG	CTTACGAAAC	ACTGTCGTTT	AAATTAATGC	AGTCATTGTG
85251	GTGGCTTTCA	ACAAAAGCCA	AAGCATAATG	AAGTATCTCT	TTTTCCAGAA
85301	TGAAAGGCTA	GCAAAACCTAA	TGAAAAGGTT	AGAATGGAAA	ATATGAGTTG
85351	GTCGGTTGAA	CTCGGGTTAC	TCATTTGAGC	TCAACTTCCA	TTTTAAAAAT
85401	TGTACTTCTT	ATTAAAGTTA	TATAGTAAGG	AACCAAAATA	TTCTACAAAA
85451	TTTTTTTATA	AAAACAGTAA	CATTCTGACC	GTCTCACCTT	TTCTTACCTT
85501	CCCAGAGACT	GTTGCTTTCA	TCTGTTTTGA	TTGTTGATTT	TAACACTCAT
85551	CCCCATGTCT	TTAAATATCA	TGCTTGTGCT	ACTTCTGGAA	TTTTCAGTTT
85601	TGGGGATTTT	TTTTGACTTT	CCATTGTGGA	AGATGAGGAG	TTAGTTCCTT
85651	CTTCTGCCT	GCCTCATCAC	AGAAGGGCTC	TTTTCTGTG	CTCCTGTCTT
85701	CCCAATATTT	AATATAGTAG	AAGTGAAACA	TCTGCATGAT	TTTGACTAGA
85751	TAAATGCTTT	CTGCAGCTGA	TCATAGAGTG	AACAGTGATG	ACCTCTTTCC
85801	TGTATCAGTC	TTTGTCTTAT	TTTTTGTATG	TGTGTCTTTT	TTTTCTGACA
85851	CTTGGTGAGT	TTTGTATTTT	TGTCTTAGGG	GTTAACTTTA	TTTATTTATT
85901	TATTTTATTT	TATTTTATTT	TATTTTATTT	TATTTTATTT	TTTGAGATGG
85951	AGTTTCACTC	TTATCACCCA	GGCTGGAGTG	CAGTGGTGCA	ATCTCGGCTC
86001	ACTGCAACCT	CCGCCTCACG	GGTCAAGTG	ATTCTCTTGC	CTCATTCTCC
86051	TGAGTAGCTG	GGATTACAGG	CGCCCAACCAC	CATGCCTAGC	TAATTTTGTG
86101	ATTTTTAGTA	GAGATGGGGT	TTCACCACAT	TGGCCAGGCT	GGTCTCAAAC
86151	TCCTGACCTC	AGGTGATCTG	CCCGCCTCAG	CCTCCCAAAG	TGTTGGGATT
86201	ACCGGCGTGA	GCCACCGCAC	CTGGCCTAGG	GGTTAACTTT	ATAAGTATAA
86251	TGGCATATAA	TAATTTTAGT	GTTCTATTCT	TTAACCAGCA	TGTATTCGAT
86301	CCCTATAACG	GGTGATGATA	TCTCTTTTCT	CTCTTTTTC	AACACAAAGT
86351	TTTGGTGGAC	ATCATCTTTT	AAATGATTAA	ATTTGCTTAT	GTTTCTCTTA
86401	TATGATTTGC	CAGCTTTTAA	TGATAACTCT	TGGCACTCAG	CTATTACATA
86451	TAAGGCAGTC	AGTGAACCTA	GCATCTCAAT	TTCTTTTCCC	TCTTCCACTA
86501	TCCACTCTTA	TTCATGGTGT	CATTCTATAT	AAGTTGTATC	TCACTTTATT
86551	GTGCTTTGCT	TTATTGTGCT	TGGAAGATGT	TGAGTTTTTT	TTTTTTAAAC
86601	TAATTTAAGG	TGTATGGCAA	TCCCGCATTG	AACAAGTCTA	TTGGTGCCAT
86651	TTTTCCAACG	TCGTGTGCTC	CACCTCTGTG	CTCTGCCACA	TTTTGGTAAT
86701	TTTGACAATC	GTTTCAACCT	TTTTCAATTT	TGATTATATC	TGTTAAGGAG
86751	ATCTGTGGTC	AGTGATCTTT	GATGTCATGA	TTGTCAATTGT	TTTGGGGTGC
86801	CACAAACCAT	GCCCTTTGAA	GATGGTGAAC	CTAATCAATA	AATGCCGTGT
86851	GTTCTGACTG	TTCCACCAGC	TGGCCATTCA	GGCATCCCAG	ATCCCTGAGG
86901	CACAAATGGT	TTGAAATTTG	GCCAATTAAT	AACCCTGCAG	TGGCTTCTCA
86951	GTGTTCAAGT	GAAAGGAAGA	GTCAGTTGCA	TGTCTCTCAT	TTTAAATGTA
87001	AATCTAGAAA	TAATTAAGAT	TGGTGAGGAA	GGCATTTTGA	ACTCTGAAAC
87051	AGGCCAACAG	CTAAGTCTCT	TCTGCCAAAC	AGTTAGCAAA	GTTGTGAGTG
87101	CAAAGGAAAT	TTTGTGTTTT	ATTTTTTTTG	AGACAGGATC	TCTCTGTGTC
87151	ACCCACGCAG	GAGTGCAGTG	GTGTGATCAT	GGTTCAGTGC	AGCCTTGATT
87201	CCTGGGCTCA	AGGGATCCTC	CCACCTCAGC	CCCCTAAGTA	GCTCAGACTA
87251	CTAGTGTGCA	TCACCATTCC	TGGCTAATTT	TTTAAACATT	TTTTTCTAGA
87301	GATGGGGTTT	CACATGTGTA	CCCAGGCTGG	TCTTGAACCT	CTGGGCCCCA
87351	GTGATCCACC	CACCTTGGCC	TCCCAAAGTG	CTGGAATTAC	AGGCATGAGC
87401	CACGTGTCCT	GGCCAGGAAA	AATTCCTGAA	AGAAATTAAA	AGTGATACTC
87451	CAGTGAGTGA	GCACATGAAT	GATAAGAAAG	TGAACCAGCC	TTATTGCTGA
87501	TATGGAGAAA	ATTGTAGTGG	TCTGGATAGA	AGATCAAACC	AGCCACAACA
87551	TTCCCTTAAG	CCAAAATCTA	ATTCAGAGCA	AGCGGGCTCT	TTTCAGTTCT
87601	ATAAAGGCTA	AGAGAGGTAA	GGAGGCTTCA	GAAGAAAAGT	TTGAAGCTAG
87651	CAGAGGTTGG	TTTATGACAT	TTAAGGTAAG	AAGACCTTTT	GATAACATAA
87701	AAGTGCAGGT	TAAAGTGGCA	AGTGCTAGTG	GAGAAGCTAC	AGCAAATTAT
87751	CCAGAAGGTC	TAGCTAAGAA	AGTGGCTACA	CTAAACAACA	GATTTTCATT
87801	ATAGACAAAA	CAGCCTTATA	TTACAAGGTG	CCGTCTAGGA	CTTCCATAGT
87851	TACAGAAGAG	AAGTCAATGC	CTGGCTTCAA	AGCTTCAAAT	GATAGGCTGA
87901	CTCTTTTGTT	AGGGGCTATG	CAGCTGGTGA	CTTTATGTTG	AAGCCAGTGC
87951	TCGTTTACCA	TCCAGAAAAT	CCTAAGGCC	TTAAGGATTC	TGCTTGCCCTT
88001	TCTATTAAAT	GGGAACCTCA	AAAGCCTGGA	TGACAGCACA	TCTGTTTACA
88051	GCATGGTTTA	CTGAAGAGTT	TAACCTCACT	GTTGAGATCT	ACTACTCAGA
88101	AAAAAGATTG	CTTTCAAAAT	AGTTCTGTTC	ACTGACAATG	CACCTAGTCA
88151	CCCGAGAGCT	CTGATGGAAA	GGTGCAAGGA	GATAAATGTT	GTTCCTCATG

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88201	TTGCTAATAC	TACATCCATT	CTTCAGCCCA	TGGATGGAGT	AATTTTGACT
88251	TTGAACCTCT	ATTATTTAAG	AAATACATTT	CATAAGGCTG	TAGCTGCCAT
88301	ACATAATGAT	TCCTCTGATG	AGTCTGAGCA	AAGTGATTTG	AACATCTTCT
88351	GGAAAGGAGT	CATCATTGTA	GATGCCATTA	AGAACATTTG	TGATGAATTG
88401	GAAGAGGTCA	AAATACCAAC	ATTAACAAGA	GTTTGGAAGA	AGTTGATTCC
88451	AAGGCTCATG	GATGACTTTG	AGAGGTTCAA	GACTTCACTA	GAGGATGCCA
88501	CTGCTGATGT	GTTGGAATTA	GAAGTAGAGT	GTGAAGATGT	GACTGAAATG
88551	CTGCATCTCA	TGATAAACT	TGAATGAATT	AGGAGCTTCT	TCTTATGGAT
88601	GAACAAAGAA	AGTGATTTCT	TGAGATGGAA	TCTGCTCCTG	CCTGGTAAAG
88651	ATGCTGTGAA	CATTGTTGAA	ATGACAACAA	AGAATTGAGA	ATATTATATC
88701	AACCTAGTTG	ATAAAGCAGT	GGCAGGGTTT	GAGAAGATTG	ATTCCAATTT
88751	GAAAAAGTT	CTACTGTAGG	TAAAATGCTA	TCTAACAGCA	TTGCATGTTA
88801	CAGAGAAATT	GTGAAAGGAA	GAGTCAATGG	ATGTGGCCAA	CTTCTTTGTT
88851	GTCTTATTTC	AAGAAATTGT	CACAGCCACC	CCAGCCTTCA	ACAGTCACCG
88901	CCCTGATCAG	TCAGTAGTCA	TCAACATCAA	AGGAAGACCC	TCCGCCAGCG
88951	AAAGCATTAT	GACTTGTTGA	AAACTCAGAT	TATTATTAGA	ATTTTTGGTA
89001	ATAAAGTATT	TTCAAGTTAA	GGAGTATATA	TACATTTTTT	AGACCTAATG
89051	CTATTGTACA	CTCAATAGAC	TGTAGTAGAG	TGTAAACATA	ACTTTTATAT
89101	GCACTGGGAA	ACAAAAAAGA	AAATGTGTGA	CTCATTTTAT	TGTGGTGGTC
89151	TGAAGTCTAA	CTCACAATGT	CTCTGACGTA	TGCCTGTATA	ACCTCAGGGT
89201	ATGTAATTGA	GATTTTAATT	TGTTACCCTG	ATATTTGCAT	TTGTTTTAGT
89251	CGTAGCTCTA	TAGTTAGATA	TCATTAATGT	TCATCTCTAG	TCCTTTTGCT
89301	GTGGTTTATC	TCATGATCAC	TTACTTGCGT	GAAAGTCATC	TTCAAGTAGT
89351	TGCCCTAAGA	ATGCTCAGG	GGAGCAATAT	TCTGTGAGAT	CTTGCAATTGT
89401	TCACAGTTGT	AGCTTAACAT	TTGAAGGATA	GTTGAAACAA	AATGAAATCC
89451	ATTTTATTGA	CTCACATTTT	CTTTTTCTTT	TTTTTTTTGA	GACTGGGTCT
89501	TGCTCTGTTG	TCCAGGCTGG	AGTACAGTGG	TATGAACATA	CTCACTGCA
89551	GTCTCCAAC	CCTGGGCCCA	AGTGATCTTT	TGGCTTCAGC	CTCCTGAGTA
89601	GCTGGGACTA	CAGGCGCATA	CCACCAGGGC	TAGCTAATTT	TTAAAATATT
89651	TTGTAGAAGC	CAGGTCTTGC	TGTGTTGCCC	AGACTGGTCT	CAGACTCCTG
89701	GCCTCAAAGG	ATCCTCCTAC	CTTGGCCTCC	CAGAGTGCTA	GGATTACATG
89751	TGTGAGCCAC	CACGCCTGGC	TTTACATTTT	CTTTTTAACT	GGTCTCACAG
89801	GTGTTGCTCT	TCTGTTTCCC	AGTTTTTATG	CAGCTGTTGG	GGGAAACCTG
89851	ATGCCAGCCT	TTTTTTCCCC	ACTTTTATAG	GTGACTTTAT	CTTTTTGTTC
89901	AGTGACTTAA	AATATTATTT	CTCTTTCATC	TGATAACATT	ACTAGGTTTT
89951	GACTCTTTTA	TTGCATTAAA	GTTTTCTTGA	TTGACATCTT	TAAACATTTT
90001	CTTTGCTGTG	TGTTTTTGGT	TTTGTCTCTT	GGGAGATTAC	AGCTATACAT
90051	ATATTGTAAC	TTCTTTGCTC	ATCTTCTATG	TCTCTCATTT	CTCTTCTACT
90101	TTTTAACTCT	TAAAATCTAG	TTTTTCAATTT	GTTAATTTTA	TTCTCCCTAT
90151	TCTTTTAGTT	TGTATGTTTT	CCACAATGCC	TGTGCTGCCA	TGAGCTCCTT
90201	CCAATTTTAT	TTTTTGTTTT	TGTGATCAAT	AGGGAATTTT	TTCTTTTCC
90251	TGTTTCTTTC	CTGAATTTCA	TAGCTCACAT	TTTATCTTCA	CTTGTTGTTC
90301	CATTTTCCA	CTGATTTCTT	GAATTTCTAC	TTTTTGCTTT	CTCTGTGAAG
90351	ATTCTTAGAG	ATGATTATTT	CATACTTGGT	CACAATTTTT	GTCTGATTTT
90401	GGAAACATTT	TTCTGGTGAG	CCCTTTTCCA	TCCATTGGTA	AGTTTTGCTA
90451	CTCTTTTTC	ATTTTTTTTC	TTATGGAAGT	TTTATATTTA	TGCTGGGTCA
90501	ACTTCTTTTT	AAAATACCTG	GCCCCAGGCA	AACTGGATAT	TCCTGGACCA
90551	GCTTCTGCC	AAATGATTTT	ATGGAGTTGG	GGAGAGGAGA	GCAGGGTGAG
90601	TCAGGGTACC	ACCTTCCAGA	CAGCACATCC	TAACCTCTCT	CATTTCTGTG
90651	ACAGAGTGTT	TCTGCAAATA	GGGTCTTCT	GTATTATTTT	TGTCCTACCT
90701	CCCTGTTTTT	TGAACCAGAT	CAAGTTCAGG	GTGGCTTCTG	CTGCTCTCCC
90751	TCTTTATCCT	ATGTTTCATG	CTTGGTAAAA	ACAGGGACAT	CTCTTTTGAA
90801	GTTCAGAGTG	AGACCTCCC	CTTTATACTT	GGATATTTTC	GGATACTTTC
90851	TGAAATTTAC	CACTTTAGGG	CCCTGTCATC	ATTTTCTGAG	CTTCTTCTTT
90901	TTATTTTTTG	TTTATATGGC	TTCTGTCCAA	TCTCCGCTTC	TTTTGGTAGT
90951	TCTTACACAT	ATGCTGGAAT	CTCTGGATTA	TATCCTTCTT	CCAGCTCTGC
91001	TGAAATGAG	TTTGAGGATT	TTCTGCCCAC	ATACAATTGT	GAAGTAGCAC
91051	TGCAACAAAA	ATCTTCATTC	AGAAGCAGGA	GAGACACCCA	GCAGTCACTG
91101	GTCCACAGCA	ATGAGGGACA	GGCATTGAGA	GGCTCCCCCG	CCCTCCTGGT
91151	GGGGGAAATT	CTTTCATTCA	AACCTGTTTA	TACTCTCTAG	GAGGAACTCC
91201	CTGCCCTATT	GCTCTCTGAA	GCCCAGCTAT	GCCTTTTGAG	AGGTTCTTTC
91251	CTCTGAGGCA	CAGTTTTGAC	AATCAACTTC	CTATAGGCGC	AAATTTGAGA
91301	GGCTAACGAT	TGTTTTAGCG	GCACAGGTTT	TTGCTTTTGT	TTTAAGATCT

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91351 AGCCTTCAGG ACCTATGTTG TTTCTAGGTG AAATCCAGAA AGTCATATGC  
91401 AACAGAACA TTTTGGATGA AGGAAAATTG CCATTGTTAT TTAGAAACAC  
91451 TCTTAATCTA ATTATATGAC ATGCTAGGTT TACACTTGCA AATCTGCAAA  
91501 TATATTGGTG TTAGCTATTA AAAGTATTCA AGATGCCCAT GACACCAGTG  
91551 GGTCTGGGGC TTAGAAGCCT TTTCTGGCAC TCTAGGCCAG GTTAGGTCAG  
91601 CTTAATCCAC AGACTCACAG CGTCCAACAA AGGAAGCTGG GTGGCCTGAC  
91651 ACCATTTAGT ATACGGGCAA AAAGTGTAG CAACCTGAAC AACACCAGAG  
91701 GGCCTTGCTG TAGTGGATCC AAGAAGACCA ATGTCAGGTT TCATTGTGTT  
91751 CAGCAGATTG TTAACCTGGG AAAAAGTGTG ACGCATTGTA GGAGGATCTA  
91801 TTGTACACCA ATTAATAATTG AGAAAGTCTG GGCCACTTCA AGAAGTACAT  
91851 TTTGGAAAAAT GCTCTCTGAT ACCCGGTATT GGATTCTATGA GACATTAGTG  
91901 TGTATATTGA AGGAAACTCC TAATTTTCTT GTTTCATGAC ATGGCTAAAT  
91951 GAATGATCTG TCTGCTGCAT TGAAAAACAC TATGGCTACA TTGGAAGGTG  
92001 CATTAATTGGT ATTTATTGTG TTAGCTTGTG AGGAATCCAG GAACTTGGTT  
92051 TATTGAACAA CTATGTTTTAT TGATCCACAT AATATTATGT GACTGAGGAA  
92101 TGGTGGCTCC ATCTGCCTAA TGAAGAACGT TTGATATGCG ATGGTTTTTG  
92151 CCCTTTTTTG TGTGTGTGCT TACACCGGAA TCTTTGAGTT TGAGCAAATG  
92201 GCTCTTAGCC CTTGGATTCT GTTGCCTGGA TTCCATTAC TTA CTACCC  
92251 ATGTCCTCAT TGTCATATCC CCAGTGGTTC CTTTCCCCAT GCTTTGTCCC  
92301 CAGGCCTCAG GTGAACAATC ACCTTGTCTA GACTAAGAAA TCCAGTGCTT  
92351 GGCCACAATT ATTTTTCCTA AGATGGACAT ATGATCTGGA TTAGGGGCTT  
92401 TTGCCGGAGC TTTGGAGGAA ATGACCTCTC TTTCTTACTA AAGGTAAGTC  
92451 TGGAAAGAGA CAGGCCTAAG GCACTGCCAG TCATTTTTTTT CCCCTTGGGT  
92501 TGTTCTGCCT AGAATTCATC AAACACTAAA GAAGCAGAGT GAAGAAAAGG  
92551 AGTGGTGAAT GGGGTCTTGT TTACATCATT TGAGCTCTGG ATGGTGCTAC  
92601 CCAGGAAGTG TTAAGAAATA AATGTTAAAC CCCCTTCTAT TTA CTGGGGT  
92651 CAATATATTT TCTTTCGTTG TTTAAGCGAG TGTGCGTTGA GCTTTCTATT  
92701 ACCTGCAAGT GAGAACATCC CAATACATGC TTTGGGTGAG AGCTCATGCA  
92751 GGGCCAGTGA ATATCCTCTG ACCTCCACAG CTAGTGACTG AGCCTGCTGG  
92801 CTGCTGCAGC TGCCATCTGT CATCATCTTT GAGCCACTGA CTCTTGATTT  
92851 AAAGTCTTAG GCAGAGCCAT CCTATTTGTT CATGTGCACA CATCCTGGCT  
92901 GCCTAGGAGC TGTTTCTCTT GTGGTGGGAG GCAGGACACT GTGTCAATAC  
92951 AATTATGCAC AGGAAGGGGG GCTTTCCCAA AAATCAGAAG GAAGGTGGAT  
93001 GCTGAACAGG AAACACTGTC AAAACAAATG TGCATCAAAA CCAAAAGTAA  
93051 AATGCAAAGT CCACCTTCAGT ATCATTGTAC AGTGTTAACA CTAGAGATAG  
93101 GGTCTTGTGTT CTATTTAATT TAGAAAACAC AATTTTCTCT CTCACTCTTT  
93151 CTTTCTTTTA ATTGAAAAAT AATGTATTGT AAGTTGAGCA CCATTTAGCT  
93201 GGCTAAATTT TAACCTCAGA GTGGAGGATC TTTATAGAGT CATACAGTTA  
93251 GAGAAATCCA AAGAAGCCCT TAATACAATG TAAGTAAGAA TAATGAGGTG  
93301 CAGAAATAAT TGTTTTCCCA GTTACTTAGT GGTAATTTCA TTTGTTGCAT  
93351 GTGGTCGCAA GGTTTATAAG AAAACTCAGA GCCCAGCAAT TCTTCCAGTT  
93401 CTTCTGAGC AATTTTCCAC TAGTTAGGAG TCAGGAAAGA GGAACCGTGA  
93451 GAGCTGAGGA GCTGTGTATT TCATTAATTG TGAAATACAC AAATATTGGC  
93501 CTGTTTCCTT GCATCATATA AATTTGCAAC GTAATATTGC AGACATTTT  
93551 GCATATTACT AAAGTTCTTT GAAAAGTGTA TTCTTTGATG GTTTCTATTG  
93601 GATCCACTAT TCACACTATA ATCACAATTT CCTGGGAACT TAAGCTGTTT  
93651 CTATTTTAGT AATAGTGTA CACCATGGTG TTAACGTTGT GAAGTGTTG  
93701 CTTATCTCTT GGTGTTTGCC TTGGAAAGGT TACCAAGGGT TTGCTCTGTC  
93751 AAAGGAAATG AAAGGCTTGC CAAATTTCTT TCCAGAAAGG CTCTCATGAG  
93801 CAGCTTAAGG TTAGTACTT TCCAGACATA AAAAATGTGT TTATTAGGTA  
93851 GAATGTGTAT AGACACACTT TGTGAATAAT AGAATCTTTT CTGAAAAGCA  
93901 GCGCTACTCC TTAGTATCAG AGATCCCTTT TATCTGAGGA TATCAAAGCA  
93951 CTTCTTTTGG AAGAAGGTTT TTCTTGTGCT GAGATATATG GAAAGATTTA  
94001 CAAGTGATATA GCAAACGGAA TACCTTCAGG CACTTCTCCA GACCAGTAGC  
94051 CACGCCAGAA GGAAGAGCAG ACTCTGCTCT GTCAATGACA GGGCTGCACT  
94101 GCACCCTAGT CCCTTTCTCA GTAACATAAT CAACGTGAGA AAGTCCCACC  
94151 TGCCTTTGAT TATTGGCTCA GCTGGTGGGT CCCCCGTAAC TAGCTTTTCT  
94201 AAGCTGGATG AATGATGCTC ACTTCTATGT GCAGATGCTT TTTCACAAGC  
94251 TGTCAATTGT AGAAGGACAG CGAGCGATCA GGTTCTTACC AATATCTGTG  
94301 AAATGCGATT AGATTTTAGT CTGTGAGGCA TTTTCAGATT GAGCCACCTG  
94351 ACTCTGCCCA CATCAGAGAG AGAGCCTCTG GTCAGGACCA GGTGGTAGCC  
94401 AGTCACTGTG TCACTAGCCT GGCAGCCTCA TTTAAGGGTT GTCCCTATCA  
94451 AACTATCGAG GCACCTGTTG GTACTTACCC AGCACTGGAT TGGATGTTTA

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94501 TTTTATTATTT TTATTTTTTAT TTTTATTTCAG AGAAGGGGTA TTGCTTTGTT  
94551 GCCTGGGCTG GAGTGCAGTG GTGTGATCAT AGCTTACTGT AACCTCAAAC  
94601 TCCTAGCTCA AATGGTCCTC GCGCCTCAGC CAACCAAGTA GCTGGAAC TA  
94651 TAGTTGTGCA CCACCATGCC GGGCTAATTA AAAAATTTTT TTTTGTGTAG  
94701 AGACAAGGGC TCACAATATT GTTCAGGCTG GTCTCAAATT CCTGGCCTCA  
94751 AGTGATCCTC CCACCTTGGC CTCCCAAAGT GCTGAGATTA TGAGTGTGAG  
94801 CCCCACTTGA TTTAGATGGG ATGTTTAACC TGTGCCTTTG AAAAGAGCAA  
94851 TCACCGTGGC TAACATTTAC TGAGTTCTTA CTAGTTAACG TGCATTGTGC  
94901 TCCACATACA TTATCTCATT TAATCCTGCA TAACCACATG AGGTGGGTAC  
94951 TGTATTAGC CTCATTTTAT CTATGAGAAG ACTGAGGCCC AGAGAAGTTA  
95001 AATAACTTGC CCGGTATTTT ATAGTTAGTA AGCAGTGGAG TCCAGCTAGA  
95051 TTCAACAGGA CCAGCTACAT AATTTGTGGC ACCCAGTACA AATTGAAGTG  
95101 GGGTCCCTTA GAGCATTAAA CCAAGCACAG GACCCATCTA AGCGTGGGCC  
95151 CTGTGGGAGT GCACAGGGTG CACATCCATA AAGCAGCCCT GCCTGCGCAG  
95201 ACAGACTGGT GACCATATAA AGAAAGCACA CTCTCAACTA AACAGTAGG  
95251 GCTGCACAAC ACACAGTTGG GCCAAGATTT GACTTTGGCA CGTAAACAGC  
95301 AAATGGAAGC CTTTGTGTGC ACTCCTCAGG CACAAGTCCT CTTTAAATGC  
95351 CAGCTTTCTC TTCTGAAAAA ACGGGGAACT CTTTTCTAGC CAGAGGTGAA  
95401 CAGATCTGAG CTCATCCTGG TGCTGTGCGT TCATTACAGC CTCCCTTGG  
95451 CTGTTTGCCC TTGTGGAGTT GGTGTCTTTC TGCTGAAAGT CACCACCTGA  
95501 TGCTGTGGGT GCTATGGGAG AACAGTGAAG TTTCTGGAGG GAAGATAGGA  
95551 ATCAACCGCC TGTTTTCTCC TGGGACTGAG TTTTCTGGA GACATATTGC  
95601 TCAGAAACAA TTCCTTCCCA CAGTAAAGCA CAAGGCAAAC GGGGTGCTTA  
95651 GTTTGCATCA TATTTACAG GTATTTAATC TTCACATGTA ACTCTTGCTT  
95701 TGCAATGTAAC TCATTTAATC TTTAATAGCT ATGGGTAGGC ACTTTAATAG  
95751 CCTTGTCTTT TGATGAAGAA AGTGAGGGAG AGAGATTAAG AATGTGCC TA  
95801 TGACCTGAGA GTTGGTAAAT AGAAGAATCA GAACAGAAAT CTGTGTAGTC  
95851 TCTAGTTCTA GAGCCTACAG ACAACTGTCA CACCTTACTT CAAAGTTCTA  
95901 CCCAAGCATT CTAGAAGGAT GAGCAGGGCA GTCAGAGAGG CGGGGTGTAA  
95951 CTAGATCCCC AAATCCAGAA ATGTGGTCTT CCCATTGCCT CAGAGCAAAG  
96001 CTCCAAAGTG TAAGTGCTGG AATTTTCCCA GAGTGACAGT GTTGAGGGTC  
96051 AAACAGTCTC TCCTTATAGT TCACCAAAGG CATGGAGCAC AAATACACTC  
96101 ACACACACGC CCATGCATGA GATACAGCAT CACTCAAGAA TGATGACTTT  
96151 CTGTCCACTG GCGAGTGTGT CACCAAAGAA AGATGGCTGT GAATATATTT  
96201 AAAGGCTTGT TTGAGTATTG CATCACTCAT GCTCTTACCC AAGAACTTAG  
96251 CTTTAATATT ATTTTGTGT TCTAGTCAAC AAAAAGTGA ACAAATAAGG  
96301 AACCAATTGT GATAATAATA ATAATAATAC TTTGCATTGG TACAGTACTT  
96351 TACAGTCCAT TGATTTTTTC CCCCCTGCAT TTTCTTGTAG TACCTCTGAC  
96401 ACTAGGATTT GCAGATGTTA AGTGGGTCTA AGGAGAACTA GGTAGTGTGA  
96451 GGTGGAATTT GATCCAGATC TTTCATCTCC TCACTTCTCC CTGATGCTCC  
96501 ATGGTAAGCC ACAGTGCCCTT ACCCAGGAGG TGGGTGGGGG TGGTCATCTC  
96551 TGAAAGCTGG AGGAAGGGGG TGTAGCACTT GTCAGGATTA ATGAGATGCC  
96601 TGTTCATCCA GTTCCAAGCC TCCACTTGTT TGCCTATGTC TGCAATATAT  
96651 TTCTTTCTGA GACACTTGGA CAACCTATAT TCCCCAAAGT TAGGCTATTG  
96701 TGAGACAGTC AAGCTGGGGT CTTCAGTGT TTTACAAGTT ACTTGAATGT  
96751 TTCCAAGAGT CACCATAAAC CTGCATAAAG TGAAACTGTA GAGGCTCATT  
96801 TATTTCTTTT TCAATAGGGC TAGCTTAATG TCAGCTCGAC CATTCTAGAG  
96851 GGGTATTCTT GGAAAAATGA TTTTGTCCAA GTTCTGAAA GTACCTGAAA  
96901 AAAGTTCTGA GAGCTTTTTT GCATATTTAA ATCAAATCC TGGTGAGTAA  
96951 AGGAAATACA AGATGAGGAA GCCTAGCCTG AACACTCATT TTAGAAATGG  
97001 AAGCTGTAAT TTAGATTATT ATAAGAGGTT TGAATGATTC AGAACAGAAG  
97051 ATTGCAAAAG AAAGTATCCA GGTGACTCAT TCCCGAAGGC AGAAGGCAAC  
97101 CGTGAGTTCT GCAGGCCTGT GGGTGGCTGA ATGATGGACT AACCATCAAC  
97151 GTTTTTTTAT CATGTTGCAT TCCCAACCTG TCAATAACCA TGGACCCAAT  
97201 AACTCACTCA TTGAATAGAT TCAGAAACAG GCCCCACATG ATTTACCCAG  
97251 ATTTGGGAGA ATGGTTAGAT TACTGTCTAG ATACTTTTTA ACATAAGATT  
97301 GTAATATCAA TTGGCACAAA AATGAATATT AATTAATTTA GACTTTTCATC  
97351 TCCATATAAA GTGTGCTAAT GCTATAGGAC TTTTCTTCTC AGCAATACTT  
97401 TCTTTAGCCT ATCCCATATA GGGTAAGCCC AGTACTCATT GTACATAAAT  
97451 TACTTATGTA ATGGCAGTAC TCTTAAGATT GCAGATGCGG GTATTTTCAA  
97501 AGCACTATTT GAAATACATA TTAGTAGACC TGACTATAAA AAGATTCTCT  
97551 TGTATTCAAA CATCCATCAA TAAACTTTTA GCATCTTATT ACCCTCAATG  
97601 CAAGAGGTAG TTGGGTGGAG AGGTAGGACT CAGAGATGAT GTGGAGTTCC

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97651 CAGTAAAGAG AAAAAAAGAA CCAGATGGGG CGAAACTTCA CTGGCGGTGG  
97701 GGAGAGACAG CACAAAGCCT TCCCTTCCCT ATTCTTTCCT GTTTTATAGAC  
97751 TTCCCAGGGT AAGGCTGTAC AATTTCATGAG TCCTTTCTAA CCTTGTTACTA  
97801 GACCACATTT CCTCTTTAAT ATGGGGTACC CATTACCCCT CAAGACAGCC  
97851 ACAGTCGGTC CAGGTGGAGC CCATGGGTAA GACTGTGAAA AAGAAGCTCT  
97901 TGTCAAATCT AATAAGTGCA GTGGTGATT CTTCCCAACG ATTCAAGTCT  
97951 CGCTAAACTA GACATGCCCA TGATGCTTGG TGTTCAGAA AAAGGTGGTA  
98001 TCACTTTTTG TCAGAAATGA AAATGAAAGT TCTGAGTGAC CATGAATTTT  
98051 CTAAAATGTG TTAATATCCA AGAAACCTTA AAACCGTTTA TAAGGGGAGA  
98101 AGGAAGAGAA GCAATGGAAC AATGTTGCGA ATTGTAGAGG GCCTTTGAAA  
98151 TGAAGTTCTA TCCTCTAAAG CTCATAAGGT GGGGGAATGT ACAAACCTTT  
98201 AAAAAAGTCT GTGAGTTCTT TGGTCAGTAT GCTAATTTCT CTGCCACTCT  
98251 CCCTCTTTTT CATATTTCTC ACCAGGGTAT GGGAATATTG CTCCGAGCAC  
98301 TGAAGGAGGC AAAATCTTTT GTATTTTATA TGCCATCTTT GGAATTCAC  
98351 TCTTTGGTTT CTATTGGCTT GGAATTGGAG ACCAACTTGG AACCATCTTT  
98401 GGGAAAAGCA TTGCAAGAGT GGAGAAGGTG TTTCGAGTGA GTACTGTGTC  
98451 ATATTTAAAT TCTAACCCT GCGATCCAAT TGGCTTTAGC CTGACAGGAT  
98501 CCAGGAGGCA GTATCAGGGG CATTGTCTGC TTTTAATGGA ATAAATTTAA  
98551 TGTATGATT GTATTTTTCT GTTTTGGCCA ATGGAAGTCA AACATCTTGC  
98601 ACCTAAACTC CCTTCTTTGA GTAGCTTCCT ATTTTAGAGT GATATTTCTG  
98651 CAATCACAAC ACAAGAGGGT TAAGTATGGA TTTGCCAACA CAGATTTTTT  
98701 GAAGAGGTGA GACAAGTTCA GTTTCTCCTT CAAGATGGAA GATGGGGTTC  
98751 CTCATTGTGT TTGTAATGAT GTAGAAAAC GTAAATCCAT CCATTTTGTT  
98801 GTTGGAACCT CCTTACTCCG TTTTATTTTC AAGCACAGTG TCTTCAGGCT  
98851 AATCTGCTT CTTCAGAGG CCTGACTTCT CCAGACACTG CTCTGTGCTT  
98901 TGCACCTGTC TCCTAATGGT CTCTCTCTCT CCCATCTCTC ACTGCTGAGT  
98951 GCTCCCTCAG AAATGGCATC CTGATGTACT ACTTCCTACT GAACTGTTGA  
99001 TGATTGCTAT TGCTTAGTGT GGTTTTTTCC TTTCTGGAAT ATTTATCTTT  
99051 AAACAAGAGA CAACTATCTC AACTCAAGGA ATTTATTTAC TAAAATTTAA  
99101 ATTAATTAAT AAATTATTCC TGGCATTAGT TGCAGGCATG AGTGGCTGAG  
99151 TGATTAAACC GGGGTTCCTA ATGCCCTTTA ACTCGCACTC ATTTGTATGC  
99201 TTTACAGAAA CACCTGTTTT GCTCAGATGT AAGGTCACCT CTGCCCTCTT  
99251 ACTCACCGCT GACCTAATTC TCAAGTCTTT CAAACCTTCC TCAGGGAATG  
99301 CTTTCTTAGT ATGACTTAAT ATTTACAAAT GACATTCTGA GGTCTTTTCC  
99351 AGGATCTAGG AATGGTGGCC AAAGGCAGAT CAGCTGGAAG CTCTAAAGCT  
99401 GTGCTTTTTT CCCCCTCTAA GAACCTTTAA ACTTTGAGTT CAAGGCTGTC  
99451 TCTGCAATAA TGGCTCATAC TTCTCTTTAG AAGAATGCAA GGGAGCTTTC  
99501 AGATGAGCAG TTTTCAGAGG TTTTAAAAA GAGTAGAATG GGAGGAACGA  
99551 GGCACCATAG CTGGGTGAGC CATTTTATAA TCTCACTGAT CCTGGGTCAG  
99601 CTGCCCTCAG TTACTCATCC ACAAAGGGG ATAGAATTG AATCTACTTT  
99651 GTCAGGTTTT GTGATGATT AAATGAAATG ATGTGTGGAA AAGAGCTTGT  
99701 CATATAGGGC AGACATATAG AGCCAGGGC TTCTGTGTTT CTCTCCAAGA  
99751 GAAGCCCTCA TGGGCAGGCT AGCCACTCAT CCGGGTTTCA TCTGAGGAGC  
99801 TCTGTGGTGT GTGAGTTTTA CTGGAATGTC CCACAGCCTT TGCTCCTTCA  
99851 TGCTGGCTGG CCGGTGGCCT CATTAGACTG TGCACCTGGG CTCCCCAGTA  
99901 GTCTCCATGG AAACCATCAG TGCTCAGCTT CCCTGCTTTT CAGATGTTTA  
99951 GTTCTTCCCTA AACCAGACAT AGCAGCCTG TCTCCAAGAA CTCTTTTGAA  
100001 CTTCTTGGA GACCCCTTTT AGCTGCTGCC TCATGGCCCT CTGACTTAGA  
100051 GAAAAAAGAA TCTGGTAGTT TGAACACTCA GAACAGGATT CAATTGGGGA  
100101 AATGACTGAT CTGGCATTCT TATTTTATG TAGCTTCTTT AGAGCTCAGT  
100151 TTCTTATTT GTAGAAGAAA GGATTGGACT AAAAGTTTTT GAAATCCTCC  
100201 TTAGCAGAAA AAATCTAGT TACTATATTT GAAGTGATGG AAGAGGTTGC  
100251 AATCATCTGG ACATCTGCTA CTAAATTTAG GGAAGTATGTC TCCCCAATG  
100301 AATTCCGAC TACAAATAGA GTATATGGTT CTCCTTCCCC TTGAAGCTGC  
100351 GTCTCAAATG GACCATCAAC AGATTCTGAT ACAGAGCCTT AGAAACCTTT  
100401 ATGCTGATTG TCCACTCAGC TCCTTGAGC GCCATCAAAG ATCAAGATTC  
100451 TTTTAGGAAG GCAGACAGT TGCATATTAT TGAATTGGCA GTGCACAATG  
100501 AATGCATTGG CTGAGTATTG GAGGGTGCTA TTGGAAAGGG TGACCGAATT  
100551 CCAGGGGGAA TGTAAACACA CTTCCTAAAT ATACGAACAA CTGATCCTGC  
100601 AGCAGTTTGG TTGCTGCATG TAAAGTTTTG GTAGAAAATC TCAGTTTTCT  
100651 GCCATTGATT TAACTACAT TAAAAGTCC AATTACGTTT AGGTGGTTAT  
100701 TTGAGAAATG AAAATTGTAT AAGCTAACAA AGCTTGGGGT TGTGAATTTT  
100751 TAGTTCTCAT GGGGAAGGT TTATGTATTT CTTCTGCTCA ATGAGTGTTA

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100801 AGCCCTTCTC TTGATCTGTT ATGTTTTCTC TCAGCTCTTG GGAAGAGAGG  
100851 ATTTACGGTG GAGTAAAAAT AAAATCTAAA GTTGGCTTTC TGCCGGGCAT  
100901 GGTGGCTCAC ACCTGTAATC CTAGCAGTTT GGGAGGCTGA GGTGGGTGGA  
100951 TCACCTGAGG TCAGAAGTTC AAGACCATCC TGGCCAAGAT GGTGAAACCC  
101001 TGTCAGTACT AAAAATACAA AAATTTCGAG GGCACGGTGG TGCATGCCTG  
101051 TAATCCCAGC TACTTGGGAG GCGGAGGCAT TAGAATTGCT TGAACCCAGG  
101101 AGGTGGAGGT TGCAGTGAGT TGAGATCGTG CCACTGCACT CCAACCTGGG  
101151 TGACAGGGTG AGCCCCGTGA TTAATCAATC AATCAATAAA TAAAGTAAAT  
101201 ATAAAGTTGG TCTTCAAGAT GCCTGAATCC TGAGGTGACC CTGTTTTGGG  
101251 TCCTTCCAAC ACATCCCAGG TCTGATCCTC ATTTTAAAGA ATTGCTGAGG  
101301 GATATTGGAT TACTTAGAAA TGCTTTTGGT TGCAGAATAA TAAATGCCT  
101351 GACTATTGGA GTTTTTATGA CATGAATAAA TAAGAATTCT TCTCCTCTGG  
101401 AGTTCAGAAC TAACTGTGAA ATGGAGGAGT CAGATGGAGA TCAAATTGCC  
101451 AGCTTTATTG CTTATAAGCT GATCAGAGAA TATAGCTTTA GCTTTGTTTC  
101501 CGAAAGGGCT TCAGTCACT TTACCCTGAA TTAGGACCTT GCTGCTGCAT  
101551 TAGTTTTTCT ATTGCTGTGT AACATATGAC TACAATCATA GAAGCTTAAA  
101601 ACAACACTTT TAAATGGCCT TCTTGCACCA CCACTTAAAA TGTTTAATTT  
101651 TGCTCTCAGA TGATGTTTCA AAACAAAGGA AAGGTAAAAG TAAAGGTGCC  
101701 AAATTATTTG CAGATGTGCA TAACCAAACC CAAATGAAAC TAAAAAAGA  
101751 ATGCTCACAA TTTTCTTTTT TTTTTTTTTT AAGTGGAGAT GGGATTTTAC  
101801 TGTGTTGGCA AGGCTAGTCT GGAACCTCTG GCCTCAGGTG ATCTGCCCTC  
101851 CTTGGCCTCC CAGAGTGCTG GGATTACAGG CGTGAGCCAC CACGCCCAGC  
101901 CACACACATT TTTTAAAGCC GGGTGTACAG ACCAAATAAC ATATTAAACT  
101951 AGATGTAAAG AAAGAACCAA AAGTGAATTC ACCAGAAAAG ACATGCCACT  
102001 AAGACAGAAT GTAAATTCTG TAGAAACCAG AGTACTCAAT GCAGAAGGAT  
102051 ACTTTTCTAC CAGAAAGTGC TTGCCAACAA ACAACAAAC AAAAACGCCT  
102101 TTTACAGACC CAAGAGGGAT GCAAAGTTCT TTAAGTAAAG CACCTTTTAG  
102151 CCAAATCAAA TCACATATAA AGTCAAAAAG AACTCGCCAA AGGGAGGGAG  
102201 TCTGAGAATC TGAGAGGAGA GTCACCCAGA CAGAAGAGGC AACAGACAGA  
102251 AGCAGAGAGC AGAAAGGGCT CAGTCAGTAC TGCACCTCAGT TCCAGGGACC  
102301 TCTCATTCTT CTGAGGTGCA CTCACCTTGA TCCCACCTCT GACACCATT  
102351 ATGTCACCTT AAATAACATA CAGACAGAGG CTCATTGAAA GAAAAATGATA  
102401 TTTACTCAGG GATGGGCATT GCAGTGGTAA CATACTGCC AGTTTAAACT  
102451 ATGTGTGCAT TCAGGGAGGT AAAGCAAAA AAAAAAATA AGGTTTTTAA  
102501 AGGAAAAATG AACAGGATTA CATAATTGTT TTGAGCTAAT TATCCTTGAA  
102551 TACAAGGATC AATAACAAGG GTGATGCCAG TCCAAGGTTG GACAGTCAGT  
102601 TGCTGGGTAG ATGTCTTCGC AGAAATGCTT TTCTGCATAA CGAGGTGATG  
102651 GGTTTTGTGC AAGGTTGTAG TTTTTCAGT CTTTTATGAT AGCTCTTGTA  
102701 ATCAGGCATT TGTGCATGAG AATCCTTCCT TCCTGGCTTT CCCTGACTCT  
102751 GTTTGTGAGA GTTTTAAAGCA CAAGTAACCC CATTTTGATT CTGACAATTT  
102801 TCATGCTCCC AACACTCATT AACAATGGGT TAAGAAATTG AACCTTATC  
102851 TCACATAGCA AGAAGCCTGG AGGTACGTTG ACTCAGGCTT GTGCTATCAG  
102901 CTCCACAATG TCAGGTGTAT CCAGATTTGT TACCTCTTTC TGCTCTGTTT  
102951 TCCTTGGCAT GGTAGCTCTT CATCCTCAGA CTTGTCACTC ACATTGCAAG  
103001 ATGGCTGCTT CATGACCAA TAGCACGTTT TCACCCAACC TCATATCAGG  
103051 AAATACAAA GGAACCTCCT TAAAATTTAT CTTTTTTTAG AGCAGTTGCA  
103101 TATTCACAGC AAAATGGAGG GGAAGATACA GAGATATCCC ATATCCCCTT  
103151 GCCCTACAC ACATGTGCAG TCTCCCTCAT TATCAACATC CCGCACCAGA  
103201 CTGGTACATT TGTTACAATT TATGAACCTA CATTGATGCA TCATTATCAC  
103251 CTAGAGTCCA TAGTTTACAT TAGGGTTTCC TCTTGGTGTT GTAGAGTCTA  
103301 TGAATTTGGA CAAATTTATA ATGACATGCG TCTACCATTA TAGTATCATA  
103351 CATAGTATTT CACTCTCCTA AAAATCCTCT GTACCTGCTT TGTTTATCAA  
103401 TCCGTTCTCT CTAACCTTTG ACAATGACTC ATGTTTTTAT TAGTTTGTGTC  
103451 TTTTCCAGAA TGTCAATTAAT ATGGTTTGGC TGTGTCCCA CCCAAATCTC  
103501 AACTTATATC TCCCAGAATT CCCATGTGTT GTGGGAGGGA CCCAGGGGGA  
103551 GGTAAGTGAA TCATGGGGGC CAGTCTTTCC TGTGCTATTC TCATGATAGT  
103601 GAATAAGCCT CACGAGATT GATAGGCTTA TCAGGGGTTT CTGCTTTTGC  
103651 TTCTTCCTCA TTTTCTCTT GCTGCCACCA TGTAAGAAAT ACCTTTTACC  
103701 TCCCACCATG ACTCTGAGGC CTCCCAGCC ATGTGGAAC GTAAAGTCAA  
103751 TTAAGCCTCT TTTTGTTCCT AGTTTCAGAT ATGTCTTTAT CAGCAGCGTG  
103801 AAAACGGACT TATACAGTTG TGTAGTTGGA ATCATACTGT ATGTAGCCTT  
103851 TTCAGACTGG CTTATTTTAC TTAAATATGG ATAAAAGTTT CCTCTATGTC  
103901 TTTTCATGGC TTGTAGTCCA TTTCTGCTGG GTGGTGAATA ATATTCCATT

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103951 TTCTGGGTGT ACCATAGTTT ATGTATCCAT TCACCTACTG AAGGACATCT  
104001 TGTTTGCTTC TAAGTTTGG TAATTACGAA TAAAGCTGAT ATAAACCTCT  
104051 GTGCACAGGT TTTTGGGTG AACATTAGTT TTCAACTCCT TTAGTTAAAT  
104101 ACAAAGATGT GTGATGACTG GATTGGATGG TAAGAATATG CTTAGGTGTA  
104151 TAAGAAATTG CCACACTGTC TTCCAAAGTG GCTATACAAT TTTGTACTTC  
104201 CACCAGCAAT GAATGACAGT TCCTGTTGCT CCACATCCTC ATCAGCATTT  
104251 GCTGTTGTCG GTGTTCTGAA TTTTCTCAAT TCTAAGTGTG TAGTGGTATC  
104301 TTGCTTTAAT TTGCATTTCT CTGATGATGT ATAATGTGGA GCATCTTTTC  
104351 AGATGCTTAC TTGCCATCTG TATATCTTCT TTGGTGAAGT GTCTGTTAAA  
104401 GTCTTTGGCC TATTTTTTAA TTGAGCTATT TGTTCCTTTA TTGTTGAGAT  
104451 TTAATGTATA ATGTGTAATG TATTATTATT ATTATTATTA TTATTATTGA  
104501 GACAGAGTCT CACTCTGTCA CCCAGGCTGG AGTGCAGTGG TATGATCTTG  
104551 GCTCACTGCA ACCTCTGCCCT CCCAGGTTCA AGTGATTCTT CTGCCTCAGC  
104601 CTCCCAAGTA CTGGGATTA CAGGCATGCA CCACCATGCC TGGCTAATTT  
104651 TTGTATTTTT AGTAGAGATG GGGTTTCACT TTGTTGGCCA AGCTGGTCTT  
104701 GAACTCCTGA CCTCAGGTGA TCCACCTGCC TCGGTCTCCC AGAGTGCTGG  
104751 GATTACAGGC ATGAGCCACT GTGCCTGGCC ATATTTTATA TATTTTGAAT  
104801 TATATTCCTT TATCAAGTAT ATCCTTTGCA TTTTCTATCT AGTATATCCT  
104851 TTGCAAATAT TTTCTCCCAA TCTGTGGGTT ATCTTTTCAT TCTCTTGATA  
104901 GTGTCTTTAA CAGAGCAGAG GTTTTAAATT TAATGAAGTC CAGCTTATCA  
104951 ACTATTTCTT CTATGGAGCA TGTGTTTGTG GTATCTAAAA AGTAATTGGC  
105001 ATACTCAAGG TCATGTAGAT TTCTTCCTAT GTTACCTTCT AGGAGTTTTA  
105051 TACTTTTGCA TTTTACATGT AGGTATGTGA TCACTTTTAA GTTGATTTTT  
105101 GTGAAGGGTG TGAGCTTTGT GTCTGCAGCC ATATTTTGTG CATGTGTATG  
105151 TTCAGTTGTT CCTGTGCCAT TTGTTGAAAA GACCTTTTTT TTTTTCTCC  
105201 ATGTTGTGCG CTTTGCTCCT TTGTCAAAGG TAAGTTGACT ATATTTATGT  
105251 GGTTCATATT TGGGCTCTCT ATTCTAGTTC ATTGACCTAT TTGCTATTTC  
105301 TTTCTCCAAT ATCATACTGT CTTGATTACT TTCGCTCTAT AGTAATTTTT  
105351 TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTGAGACGGA  
105401 GTCTCGCTCT GTCGCCCAGG CTGGAGTGCA GTGGCACGAT CTCGCTCAC  
105451 TGCAAGCTCC GCCTCCCGGG TTCACGCCAT TCTCCTGCC CAGCCTCCCA  
105501 AGTAGCTGGG ACTACAGGCG CCCGCCACTA CGCCCGGCTA ATTTTTTGTA  
105551 TTTTATAGT AGACGGGGTT TCACCGTTTT AGCCGGGATG GTCTCGATCT  
105601 TCTGACCTCG TGATCCGCCC GCCTCGGCCT CCCAAAGTGC TGGGATTACA  
105651 GGCGTGAGCC ACCGCGCCCG GCCACGCTCT ATAGTAATTC TTAAAGCCAG  
105701 TTAGTGTGAG TCCTCCAATT TTTTCTTCT TTTTCAATAT TGTGTGACA  
105751 TCAGTCTCTT TTATGGAAGA AAAATCTTTC CCAGAAGTTA CCCTGTAGAT  
105801 TTCCCTTCT GTCTCATTGA CCAGAATGAG ATCACATTAG CATCTGCAAG  
105851 GGAGGATAGG AAAGGAAGTA TCGGACAAAG GACGATAGTA TTGCCATAAT  
105901 GGACCATGTA TTCTCAAAGT TTGGTCCCTC AACCTTAGGC ATCAGTATCC  
105951 CTTGGACCAT TCGCATCGGC ATCCACTGGA AACTTGTTAG AAATGAAAAAT  
106001 TATTTGTGGT CGTGGTGGGG GCGGTGGGGC TGGAGCTCAG CAATCTGTGT  
106051 TTACCAAGCT GTCCAAGTGA TTCCAATGCT TAAGGAGCAG AGGAATCATG  
106101 TTTCACTCTT TGGGGCTGAA CACATTGCTG TGATGAACAA AATTAGAATT  
106151 CTGTTAGCGA AGAAGTTGGA GTAAGCAAAT GATAACGTCT CACATAGATG  
106201 TCAATTAAT GCTAGCCACT GAGATCACTC ATAGAGAAGA TGTCTTCACT  
106251 CTTCTTTGTC ATAAATTAGG TGGCTGTTGG GATCCTTGAA TCAATCAAGA  
106301 TAAGCTAGCC TATCACAAAC AGCCTACTCC CACTCCTGCC AGATCTGCTG  
106351 CAACCCAGGC AGCTTCTCAG GCTCAGGGGC TAGATAGGGT GGGGAAACA  
106401 GCTGAGCGCT GCTGTCTGGC TTTTCAGAGC GTTGTCCCTC AGGTAGAGCC  
106451 CATTGGCCCG AGCTAGTTAC CAGGTCCCAT TCGTAGCTGC AAAGGGGGTT  
106501 TGGAATGCAT TCTTTTATCT CCAAGAATAG TAGTGGATGG TAAAATTGTT  
106551 GCGCACTGGT ATAGTCATGT TCATATGCTC TAAGATGCAC TCCTGGGTCC  
106601 CACTCTAGGG TGACCAGCCT TTCAGGAATT TAGTTCCAGG TCGTTTGTGC  
106651 ATCACTCTTC GGGGGGAATA CTACTATTGT GAGACTCATA GATTTACAC  
106701 CTGAGAAAAT GGAGCCTGTG AGGTGACTTG CCTGGATCCA CACAGTGAAT  
106751 TGGTGGTAGG ACCTGGATTA GAACCACTAA TCCTGCCTTA ACCTCTTCCA  
106801 GATGGGCTGA AAATATTAAT GTCAGATTAA TCTACACCAT GAAACCAATG  
106851 TGGAGTTAG AATATTTTAG TATACCATAC TAATTAAGT AAAAATAATT  
106901 CTTCTTGAGT TCCAGGGGAA ATATCTGGGC AGTTAGCATC CCAAATATCT  
106951 GCTTATTTGG GATGAAGGAG GGCTGACATT GGATTCTGAA GCAGGTTTGT  
107001 GAAGCAGGCG GCCTCTTTCT CCCCTGCTGT GGGGTAGCTG TCTTGCTGGG  
107051 CCAGGCTGAT TATCACTTGA TAGGATGCTG TAGGAAAACC AGTCAAATTC

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107101 TGGACTGATT CTCATTTTCT TGGCTCCAAG CTGGACTTTG GCCTCTGGTA  
107151 GGAAGTACCT GCTTCTTTTT TTCCGGCTCG GATCAGCAGG CTTTCTGGTA  
107201 TTTCTGTAA AACCAAGGGA CACCTTTTTT TTTTCTTCTT TTTCTTTTTT  
107251 TGGCTTTCCC CCCGCCCAA GGATATGGCA GAAATGTTTA TTGCTTATG  
107301 GATCCAAATG ATTCTGGGTG TCACTGACAA ATAATAAAC ATTACCCTAG  
107351 ACTTACGAGT GCCAAAATTA CTTGGAAAT TTAGAACAGG CCACATGTTT  
107401 AAGATGGAAG TGATGACAAT CTCAAAGTGC TAATACGGTT AAATTAGTGG  
107451 ACTGATCAAC CACTTTAGAT TCCAGGAAGG GGCATGTGGC GGAAGCCAAA  
107501 GACTCCTGCA GGCCTCTGCC ATGTGCCTGG CATGGATCAA GGAGAGGCTT  
107551 TTAAGAACAC AATTGGCAGG AAGCTTCTGT TTCTCCCAAG GCATCTTTGA  
107601 GCTAGCATTC AGCAGCAAAA GGGTTAACTT AAAATAATTA CTATTTCAAG  
107651 AGGCAGGCGC AGTGGTCCAC ATCTGTAATC ACAGCTCTTT GGGAGGCCAA  
107701 GACAGAAGGA TTACTTGAGC CCGGGAGTTC AAGACCAGCC TGGGCAACAT  
107751 AGTGAGACCC CATCTCTGAA AAAAAAAGA AAATCGAGCC CGGCGTGGT  
107801 GGCTCATGCC TGTAATCCCA GCACTTTGGG AGGCAGAGGC AGGCAGATCA  
107851 CTTGAGGTCA GCAGTTTGAG ACCAGCCTGG CCAACATGAT GAAACCCTGT  
107901 TCCTACTAAA AATACAAAAA TTAGCCTGGC ATGGTGGTGT GTGCTTATAG  
107951 TTCTAGCTAC TCGGGAGGCT GAGGCAGGAG AATCACTTGA ACCGGGGAGG  
108001 CAGAGGTTGC AGTGAGCTGA GATTGTGTCA CTGCACTCCA GCCTGGGTGA  
108051 CAGAGTGAAA CTCTGTCTCA AAAAAAATA GATTCAAATT ACTTGGGTGA  
108101 GGTGGTAAGT GCCTATAGTC CTAGACACTC AGGAGGCTGA GGAATGAGGA  
108151 TTGCTTGAGT CTAGGAGGTT GACACTGCAG TAAGCTAGGA TCACATCACT  
108201 GTACTCTAGT TTGGGCAACA GAATGAGGCC CTGTCTCTAA AAATATTTTT  
108251 AAGTAAATA AAAAAATAAA AATTATTATT TCAAACAGAT CAAAATACCC  
108301 TGTTTTGGAA ACTGGGTATT ATTTTCAGCA TTGTAGGTTT AGCTACAGTT  
108351 TCCAATACCT ATTGGTAATG AAAAGTTCAA GGGTCTTGGC TGTGCACATC  
108401 AGCATTGCAC CCAAAGAGGC AGGGGAGGAG GGCAGAGTGG TAGGCTGTGG  
108451 CTTTAGTTTA AGAAATGGCT GCCTTTCAGT AGTGTAGAAA AGACACAATA  
108501 TCAGTGAAC TCACTTTACC AGTGCCATA TGTCTCTGGA GTATCTGCTT  
108551 CTATGTCATG CCTGCCCTAG TACATAACCAT ATTATAAGTT CCTAACAAC  
108601 AACTCAGTAG GATTAATGTT ACATAATAAT GTGAGTTTAT TTATTATTAT  
108651 ATTGAGACGG AGTCTCACTC TGTGCCCAG GCTGGAGGGC AGTAGCATGA  
108701 TCTCGCCTCA CTGCAACCTC CGCCTCTTGG GTTCAAGCGA CTCTCCTGCC  
108751 TCAGCCTCCT GAGTAGCTGC GGCTACAGGC GCGTGCCACC ATGCCTGGCT  
108801 AATTTTTGTA TATTTTTAGT AGAGACGAGG TTTCACCATA TTGGCCAGGC  
108851 TGGTCTCGAA CTCCTTACCT CGTGATCTGC CCACCTTGGC CTCCCAAAC  
108901 GCCGGGATTA CAGGCATGAG CCACCACGCC CTGCCGTGAG TTTATTTTTA  
108951 TCAGAGAGAA GGCCCTGGTT TTAATGTAAA CAATTGCTTT CTTCCTTTTC  
109001 CTAGGCGGCA AGAAGGTAGG AAGTAATTAT TTGAAAATGC AAATAATTTT  
109051 AAAGCTTTAT CAATCAAGTC TGTTCCAAAT TAGTTTTAAGG ATTTTCTGTA  
109101 GCTTTAATGA TAGGGCCAGA ATGTACATTT GGGGTGACCT ACATATATGA  
109151 CATCCACAAA ACAGACTACA CAACATTTCT TAATGACAGT CCATGACAGT  
109201 TTTTCCATGG ACGGCTCCTT CTTTCCCTCC TTCATTTAAC ATAGGATTGC  
109251 TCAGCCTCGA TACTATTGAC ATTTTGGTCT GGATAATTCT TTGTCATAGG  
109301 AGTTGTCCTG TGAATTGTGA GATGTGTAGC AGCATCCCTG GGCCTCTACT  
109351 CGCTTGATGC CAGCATCATC ACTGCCCGCA GTTATGACAG CCAAATGTC  
109401 TCCAGACATT ACTAAATGTG TCCTCAGGGG CAAAATCGCC CTAGTTAATT  
109451 TGACCATAGC TATACTGGGA TATAAGGGGA CAATTGCCCC AAAGACTACC  
109501 AGGTGCATGC CCTGGTCCCC TGTCCAAATC TTCCACACGA GCTCTGGTGC  
109551 CTCCACCAAT GATCCTAATC AGTTTTTCAG TGCTAGCGCC ATTCCGACTC  
109601 AGAACTCTCC TCCTTCAGAT GGGTCCTTAA AGAGGGCTTT GCAGATTTTA  
109651 TACTCCGGGA ATGAGATCAT TTCTACCAA GAAAGCAAAA ATGCCTGGAG  
109701 ACTTGACTCT GATGAGTACA CATAATGACA AATTGTTCTG CTATTATTCT  
109751 TCACTAGGCA AACCATCTCA GCACTAACTT TAACTGACCC ATAGGGACTT  
109801 ATCTAATGTA TGGTTCTTCT TTCTTGGCTT ACCTTTCATA ACTGGCCAGT  
109851 ATCCCTTTGG TGTTTCTGT TGTCTTCTGA GGTCAATTATA GAACGTTTTA  
109901 ATGGCCTTTA AAGTGCATCT TCACTCTTTT CTATGCACAG TAAAGATATC  
109951 AAACATTGCC TAAAATAGAA CTAATAAAA TACTGCCTGG ATAGCGTTTA  
110001 TCATTTAAAC ATTTTCCAGG TAGCTTTAAC AGAGTCTCTC TCTGTCTCTC  
110051 TGTCTCTCTC TCTCTTTTT CCCCCCGCA AGCTTTGATC ACAGGTAAC  
110101 TCTGGGAATC TGATTGTTAC TTTGGGGTGG GAAGTTATTC ATGAACATCT  
110151 GCATGCCAGA ACCTTTGTAG GGAGCCTTGG ATCGGTCATT TGTCTGAGAG  
110201 GATTTTGTGG AGATAATACT GAGTATTATG GCACTGTGAT ACCAAAGCCT

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113401 TTGCCCAGGC TGGAGTGCAA TGGTGCATC TTGGCTCACC GCAACCTCTG  
113451 CCTCCCGGGT TCAAGTGATT CTTCTGCCTC AGCCTCCTGT ATCGCTGGGA  
113501 CTACAGGCAT GTGTCAACAT GCCCAGCTAA TTCTGTATTT TTAGTAGTGA  
113551 TGGGGTTTTCT CCATGTTGGT CAGGCTGGTC TTGAACTCCT GACCTCAAGT  
113601 GATCTGCCCG CCTTGGCCTC CCAAAGTGTG GGGATTATAG GCATAAGCCA  
113651 CCATGCCCGG CCTCTCTCTT TCTCTCTCTC TCTCTCTCGA TATATATATA  
113701 TATATATATA TTCTCACTAT CAGTTAGTAC CAAAAGTTCT ATTGTTGTGT  
113751 GGGGATCAAG GATATTTTAA ACCTTCAGAA GGGAGTGCCA TACTCAAAAG  
113801 TTGAGATCAC TGGTCTTTCA AGTTAGCATC AATTTCATG ACATTCTGGG  
113851 CTTTCTTTTT TCTGTGGATT TAACATTTTC ATCCTGGCCA TAGTCATTGT  
113901 TACAAAGATT TTTTTTTTTT TTTTTTGAGA TGAAGTCTAG CTCTGTTGCC  
113951 AGGCTTGACT GCAATGGCAC AGATCTCGGC TCACTGCAAC CTCTGCCTCT  
114001 CAGGTTCAAG CAATTCCTCT GCCTCAGCCT CCCAAGTAGC TGGGATTACA  
114051 GGCACCTGCC CACTCCCTGG CTAATTTTGT TATTTTGTAGT AGAGACGGGG  
114101 TTTCACCATT TTGTCCAGGC TGGTCTCAAA CTTCTGGACC TCATGATCCA  
114151 CCTGCCTCGG CCTCCCAAAG CACTGGGATT ACAGCCGTGA GCCACCGCGC  
114201 CTGGCCAGAA GTTTTCTTTT CCTCTAAGTT ACTCCAGGA GTTGGTAGGA  
114251 TACTTTAGAG CCTGCTTCAA GATTTTCTTT ATGCCTTTTT TTAATTGTGT  
114301 TAAAGTGTGC ACAACATAAA ATTTACCATC CTGTTTTTAA GTGTACAGTT  
114351 CAGTGGCATT AAGTACATTC ACATTGTGT GCAACCATCA CTACCATCAT  
114401 CTCCAGAACT TTTCCATCTT CCCAAATGAC AACTCTGAGT CTGTTCAATA  
114451 ATAACTGCTC ATTTCTCTCT CCCCAGCTCC CTGGTGACCA CCATTCTACT  
114501 TTCTGTGTCT ATGAATTTCA CCACTCCGGG AACCTCATGT CAATGGAGTC  
114551 ATATAGTGTT TGTCTTTTTG TGTCTGGCCT ATTTCACTTA GCACAGTGTC  
114601 TTTAAGGCTT CATGAATATT GCACATGTGT CAGAAATTC TCCCTTTCAA  
114651 GGCTGAGTAA TATCCCCCTG TCTGTATATA CCACATTTTG CCTATTTGTT  
114701 TATCTGTTGA TGGACTTTTG GGCTGTTTCC ACTTTTGGT TGTATGAAT  
114751 AATGCTGCTA TGAACATGGG TGTATAAACA TCTATTCAAG TCCCTGTTTT  
114801 TAATTATTTT GGACATATAC CCAGCAGTGG AATTGCTGAG TCACATATAA  
114851 TTACAGATTT AATTTTCTG AGGAACCGTG AACTGTTTT CTACAGTGGC  
114901 TGCAACATTT CACATTTCCA CCAACAATGC CCAGGGATTG TGTCTTTCCA  
114951 CTTCCTCACC AACACTTGCT TTTTCTGTG TTTTTTTTTT TTTCTTTAA  
115001 CTTTTATAGG CCCAATGAC AGCGTTTGGT AAATTGCTGT CTGACTGCCT  
115051 CTAAGTCTTG GCTGCTCCCA TAGCTGCTGT TCTATCACTC TGGGGACTAA  
115101 GTGGAGAGGC TGTGCCGTTA GCCTTGCTTC CCTCTGCAC CTTCCCTGTC  
115151 TCCCTCCCTG CCCTAACCTA CAGCTGTGTC CCTGTGAGTC TTTCTTCTCT  
115201 ACTCGTCAGC TTGGGCCCTG TGCGCAGAGC TGGTGGGAGG ACGGGTGGCT  
115251 CAGTGCCAGG CCGACTAGGG CCTCTGCATA CGGATGACAT CCAGTTTCCA  
115301 CCAGACCTTT TTTCTACTCT GAAATCCTTT TATTCACCCA ATCATGATTG  
115351 ACTTTTCTGT TCTTCACTGT GGCTGTTTCT TCATGCTCCT CGCTAGGTCA  
115401 ACTTGATAAA CAATTATCGA ATAACACTTT TTTGTGTGTG TTCTCAACAC  
115451 TATAGGGATA TGTGGCAATA AACAAAGGAT AGTCCTTTCT CTTAAGGAGA  
115501 AAACAGCCAT GCATCAAGAC CAGTGTCCAT AATATTGTGC AGAATGATAC  
115551 CAGGGCTAGG GCAGGCAGGC TCTGAAGTCA CACCACCTTG GGTGAATGAT  
115601 CCATGCTATG TCTACTTCTT ATCAGCTATG TGACCTCAGG CTGTGCCTCA  
115651 GTTTTCTTAT TTGAAAAAAT GAGGATAATA ATGGTTCTCT TCTGTTTGG  
115701 CACTTAGTTG ACATTGAGA GCAGTGTCTG CCACATAGCC TCAATCAATG  
115751 CTATTCACCTA TTATTGTAGA AACTGTTAG CTATGGGAGC CCAGAGAGGG  
115801 ACTTGTTAAG TCTAGCTTGT ATATTTTACA TCACACAAGC ACCTGCCTTG  
115851 TCTTGCCAAT GGATTGTTCT GCTCAAGTAA AGCATAGGGG CTTAAAGCTA  
115901 AATGTTACTG TGCTTTTAT TGGCTGTATC CCTGTAGGAC CTGCTCAGTG  
115951 CTAAGTGCTT TGGAGGTGTT CAGTAAATAT TTATTGATTG TGAATTGATT  
116001 AGAGAGGAGA GAGACACGAA CCAGGTCTTT TTCCAAGCAC CCAGGATGTG  
116051 TAAGCTTCAC AAATGAAGAG ATGCTTGCTG ATGCTGCCCT CTGTCTTACC  
116101 CTTCTGGAA ATGGGCATGG AGGTGGGTGG GGCTGGAGAA GTGGAGGGGG  
116151 CCACAGAAAG GGTAGCGACA GAGAGAAAGA AACCCATGGG CAACAGGGTC  
116201 TGTATCTGGG ACGGGACCTC AGCCATCAAG CATGGCCTTG GGAGGAGAAG  
116251 ATGCACTGGC CGGATGCAG CGAGCCCTTT CGAAAGGCAA ACAGCACAAG  
116301 CAAGAGTGCA GACGGCAGGT TCGTCGGCTC CTCTGGGGCT CCCCAGGGG  
116351 ATGCCGTTGC CATTCGGTCT GCGTGAAGGA GGCAGGTTGT CTTCTTCGTC  
116401 GTCGGCCACA CTTCACTGGC TGCAAGTGTT CACGCAGATG TGCTCATGTG  
116451 ATCTTACCAC ATACGCAGAT TCTAGTAAAA AAAGAAGAAA AAATCCAAGA  
116501 ATGAGTGAGA ATTTATTTTA GCTACATGCT GACTGCCTCT CAGCTTGCCC

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116551 GTGCTCTTAC CAGATCTTGA AAACAAGGGC CAGTTTGTAT TTTTATAAAA  
116601 ATGCATCAAA GTGTTACTAA AAGATCCTAA AGGAAGACTA AAGTTTCCTC  
116651 CGAAAAGAAG CCTGGCCCTT CAAATACCAA CAAGGGATCC TCGGAAGATG  
116701 GGTTTTACTG AGCTCAAACA CTGTCTCTTC TGTTTAGATA CTGTATTATT  
116751 ACATCATTTT CCCTCTCAGA TTGAGTGATG TTTCTCCAT TATTTGTTCC  
116801 GTTCCTTGGC AGAAGTGAAT TTCACCATGA ACAACATCTG CAGTCTTTCT  
116851 ATACGAGCCT GGGGAATGCT TGAAAGAACT GATACTAAAT TATTATTATT  
116901 AATATTTGTT TGTCTACCTA TCCACTCCCC ACCCCAGGT CCCCTCTCAC  
116951 TCCCAGTAG TCACAAATGG GTGTATCGGG CATCTCGTCT CAGTTGTCAG  
117001 GACTGTCCCT TCTCATTCTA AACTATTTTG CAGATTAGCT TGAGCAATTA  
117051 GAATCAGGAA TAGATATCAT GTGGTTAAAA TAAAAGGGAA TTTATCTACA  
117101 ATTTGAAAAT AGATTACAGA GAACTCCAT GTGATTTTTT TAAAAAATA  
117151 AATTTTGCTG TGTACTATAA CAGAGTTGGC ACCAGAGCTA ACAAAAAAAA  
117201 AGCAAGTATC AACATTTAAA ATGCAGTACA TGACATGTAA ATGCCATATG  
117251 GTATTCTTGC AATGTTATTA CCAC'TTCTT TCTGGCATCC TTTTCTGAC  
117301 ATTGCTGTAT GCTTCTTGAC TCTGCTGCTC TTCAGAAAGC CTCAATTGTC  
117351 CTGAGCCCTT TAATTCTGTA TTTATATTAG GTGTCTCTCT CTTTATCTA  
117401 CCCTTTGGAG GCTTATCAAC CTTTTCCCA AGGAAGAGGA AGAAGAGGAC  
117451 CTGTACAGAT GGCTGTATAA ATATGTGACA CCTGCTTCCG TGAGCCACTA  
117501 TTGGAAGAGT TTAAGAGTTG ATGGTATTGT CCCCTGTCTA GAAGATGAGC  
117551 ACACATTTGC TTCTCTTCTC CTTTCTATTT TTAATAAATG ATCATGTGCC  
117601 TTTAATGATG TTTCTAGAAA TGTCTTGAAT TCAAATTATT TTCTATTTTT  
117651 AGGGAATAAA AAAAGGAACC CACCAACCAA ATTTTCTGAA AAGATTATAT  
117701 GGGTCAAAAT GTTAAAAGTT TGTACATAGT AATATTCCCT AAAGTAAGAG  
117751 CCTTGGTGAT CGTGT'TTGGG GAGAAATCTC TGCTTCACCA CGGGAATGTC  
117801 AGTGGATCTC TGCGTTTGCA CTGAATGTGC CACATTCTTT CATCTCCAGA  
117851 CTTTTCGCTG TGATATTTAT GGTGTTTCAA ACAATGTCTG TACCTCCTC  
117901 CTGGTCTCAG CTCAAATGTC AGTTCCTTGG GGAGCTTTTC CTGACTTCTA  
117951 AATGAAGGTC AACACCCCGG CAAATAACAT CTTGTAGACC CCAAGAATAA  
118001 CATTCATCTC ACTGTATTGA TGGTGGGCAT CCCCATCAGC CTATGAGTTG  
118051 TGTGAGGTCG GGTCCCATCT GCCTGTTTAC CACTGCATCT TCAGGTGCTA  
118101 GCACATGGCC TGAACCCAG AGAGCACTTA ATCCATACTT GATGAATCAA  
118151 TGAATGAACA TTGCTAGACA TAACCTTATA CATCTTGATA TAGAAAATGA  
118201 CCTTGAAGCT GGACTAGGTC CCAGTTACTT GAGAGGCTGA GGCTGGAGGA  
118251 TCAGCCCAGC TTGGGCAGCA TAGTGAGACA TCCCCTATCC CTCCTACTCT  
118301 CCTAATCCTG CACAATCCCC CTCTAAAAAA AGATAAACAG AGTGACCTTG  
118351 GGCTGGCGCT GTGGCTCGCG CCTGTAATCC CAGCACTTTG GGAGGCTGAG  
118401 GCGGGCGGAT CATGAGGTCA GGAGATCGAG ACCATCCTGG CTAACATGGT  
118451 GAAACCCCGT CTCCTCTAAA AAATACAAGA AAATTAGCCG GCGCGATGG  
118501 CGGGCCCTTG TAGTCCCAGC TGCTCGGGAG GCTGAGGCAG GAGAATGGCG  
118551 TGAACCTGGG AGGCGGAGCT TGCAGTGAGC CGAAATTGCA CCACTGCACT  
118601 CCGGCCTGGG CGACAAAGTG AGAATCTGTC TCAGAAAAAA AAAAAACAAA  
118651 AAAAGAGAGT GACCTTGAAA TCGAAACTAG TATTGTATGC AAATAAATGG  
118701 CAATGGGGAA AAAAAGTTCT TAGGCTTTGA AGTCCAATTA TTTTGAATAA  
118751 AAGATGGGTC TGTAGGGAGC TGCTCCCTGC TAATGCTTAT TGCCAATGGT  
118801 ATTCATATGC AGACACTTTT ACCTCATCAG GCTATACTTA GAAGTGTAAT  
118851 TCTACAGACT TATCAAGTCA ATCTTCTTAA ATACAGTATA CAATTACCT  
118901 TCACCCAGTG GTTCTGAACC CTGTAATATC CAATATTCTT TTATAGCATA  
118951 TATTTATGAA TACTCCTTTA CTACATTGAA ATGAATTTC AAGACAGTGC  
119001 ACTTTGCCAA TACAGATAAT TCTGAAAAAT TCAATGCAAA TTTTCTAGCT  
119051 ATAATATAAA GGAGAAATAA ATGGAAAGTA ATGTTTCAAT AATAGGTGCT  
119101 CTGTTATGAA ACCCTAGGAG ACCTGCTGAA GCAGTGAGTC TTGGCATCTA  
119151 TACGTAGAAT GCAATATCTC CAAATGCAGA TTGGTTCAGG TATGTTGTGT  
119201 TGATGACTAA GATGTCACAA AGGACTTTTT CTCCAGTGGT GTGGTTTTC  
119251 AAAATAGAGA ACAACTCTCA GCAAGGTTCC AGCTAATCTA TTTACATTAG  
119301 AGTCAGATTC TTAATAAATT TGGTCAACTT TGAAAAGATG CAAACAATTT  
119351 GTGTGTGTGT CTTACATGAT AAAAGGGAGT TAGGTTCTTG GCTCAGATAA  
119401 TTGTAGACAT GAGTTTTTCT CAGTGGGACA TTCAAAGCTC ATGCTAAATG  
119451 TGGGATGGTT CTGTGATTTG TGGCACTGAT TGTTGTATTG CAGGACATCT  
119501 GAACGTCCTT GACCTCCTCC CAGTACATGC CAAACGTGCC CCTCCAGTTG  
119551 TGACAACCGC AAACACCCTA ACAAGTTTAG AGACCACCTC CTAGGGTGTT  
119601 GTAATCTAAA CAGGGTTATA AACAGAGCTT CCAGGGGGCT CCCATGTAAC  
119651 TTTCAGAAT TTACATATTT AATTTCTATT CTCGTGAAA TGGCCATGTT

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119701 CCAATAGTTA AGCCTCTTCC CTTGATGTAT TTCCCATGCC ATTAATATTC  
119751 AGTTCTATTC CACAAATATT TATTATATGC ATATGTGTGT GTACATCCAT  
119801 CTGACTATAC CTTTCTATGT TATGTACCTT TACTAGAATT CCAAATTATA  
119851 AAATCCTGTC AGTTTATCTC TTGCTAGATG AATGGTTTTA TTGTTTTTGT  
119901 AGAATATTTG CTTTAAACAG TACTCTCATA TTTTCTTGAG GTGCTAAAT  
119951 AGAGGAGGCA GCTGTAGAAA AATGCACTAC GGGCCAGGCG TGGTGGCTTA  
120001 TGCTATAAAT CCCAGTACTT TGTGAGGCCA ATGTGGGCGG ATCATGAGGT  
120051 CAAGAGATTG AGACCATCCT GGCCAACATA GTGAAACTCC ATCTTACTAA  
120101 AAATACAAAA ATTAGCTGGG CATGGTGGTG CATGCCTGTA GTCCCAGCTA  
120151 CTCGGGAGGC TGAGGCAGAA GAATCACTTG AACCCTGGAG GCAGAGGTTG  
120201 CAGTGAGCCG AGGTCACGCC ATTGCACTCC AGCCTGGGTG ACAGAGTAAG  
120251 ACTCCATCTC AAAAAAAAAA AAAAAAAAAA GAAAAGAAAA GAAAAGAAAA  
120301 ATGCACTGTG CCAGGCACTT AGAACATTGA GATGAAGGAG CACACTGTGT  
120351 AGTAGGGAGA CACATGGATG GATGGACAGA CAGTGATGCA GGTGAGCAG  
120401 TTCTATGGAC AGGGGACCAT GCAAGGGTGA AGGAACATGG ACAGCAGAGA  
120451 GCAAGAACTG GAGAGGGCTT CCTGCAAGAG GTAATGTCAG AATTGTGTGT  
120501 GAGGAATGAA CAGGAGTCCG ACAAGCATTA AAAAGGGCGA AGAACCTTAT  
120551 CCTAGCAGAT GGAACAGCCC TTAAGGGGAC ACAGAAGCTA AAAAGAAATG  
120601 AGCTATGAAG CCATGAGAAG ATGTAGAGGA ATGCTAAATG CATATTGCTG  
120651 CGTGAAGAA GCCAATCTGA AAAGGCTACA TGCAGTATGA TTCCAACCTAC  
120701 ATGACATTCT AGAAAAAGTCT AAACATATGA GACAGTTACA AAGATCCATG  
120751 ATTGCCAAGA GCCTGGGGGA AGAGAGGGAT GAATCGGTGG AGCAGAGAGG  
120801 ATTTTATAGG TAGGGAACT ATTGTGTATG ATACTATAAT GGTGGATACA  
120851 TGTCATCAGA CGTTTGTCCA AACCCATAGG ATGTACAGCA CCAACAGTGA  
120901 ACCCTAATGT ATACTATGGA TTCTGGATGA TATTGTCACT ATAGGCTCAT  
120951 CACTTGTAAC CAGTGCCTA CTCTGGCATG GGATGTTGAT AGTGGGGAAG  
121001 GCTGTGCATG TTTGGGGCGG GGGCTATATG GGAGATCTCT GTACCTTTCT  
121051 CTTAATTTTG TTGTGAAGCA AAAATGGTTC TAAAAAATC AAATCTTGAA  
121101 AAAGGCACTG AAGTATAAAA TGGAGCAGTA TTGGGGCACC AATAAACCAT  
121151 CCAGTCTCTC CAGAACTGCA AACTAAGTGC TACTACAGCA AGAGAGAGGG  
121201 GTGAGCAACT ACCTGCCTGC AGCGGGGGTA GGGGGGAGTT GGGGGAAATG  
121251 GCGGGGGGTG GGGGTCCCTG ACAGTTTCTT CAGAAGTGGG TTGACGTATT  
121301 CTGGAGGAGG AGGAGGAGGA GGCAGCATGA GGCAGCAGGC AGGATGCATT  
121351 TCTTGAATG GATCATGGCC AGGTCCTTAC AGCTCTCCCA CTGCCACCTT  
121401 TGGCAAACAT TCCTGGGATC CTGAAGGCTC AGACAAGGCC CATCCCTCTT  
121451 ATGTTACCAT GGGGATTATC TCTTCTCTCT TTTCTCTTTT AGTTTTCCTT  
121501 CCAAGGAAGG GTTGTCACTC CTTTTCCAAA AGGAAGAAGG ACCAAGTGAA  
121551 TGATTTTCAA GGGCACAGTG CTGTTATTTT TCGAGGGAAC CTCTGCCATG  
121601 TTCTTGAGCA TGTGCTCGT TTTCTCCTTC CCTTCTCTTC TTAGCCCTCT  
121651 CCTCTCGCT TCTCCTACC TCTCCCTTTC TTCCTTTTTC TTTTCATACA  
121701 AAGACTACAA AGAGTATACA TGGTCACTGT AGAGGCCTTG GAAAATGCAG  
121751 GGGAGTGCAA AGAAGAAAGT AAAATCCTGT AAATATCCTT TGTCCAAAGA  
121801 AATCCACCAC TAACACGTTG ATAATCGTAC TTCTGAATCT TTTCTCTGCA  
121851 TCTACATTTG GCCCAATGCT CTGGTGCTCC ACTGGCCCCA CAGTACCCCT  
121901 CCCACCTGCT ACCTACCTG TCCAAGTTTC CCTGCCCTCG GGTACTGGCA  
121951 GGGGTGTGTA CCGTGTCTG GCCACAGCCT GTGCCTTCCC TGTGTTACTC  
122001 CATCAGCTCC TTCTGGATTG CTGACCTCTG CTCTAACCCAC TGATCGTTCA  
122051 TGACAAATTT GCTACCCACC TTCTGCAGGT GACAGATCCT TCTGCCTCAG  
122101 AAGGGGGAGT GCTACTGTCC TGCTGTCTTA GAGCTGAGGG AGACGGACAC  
122151 CACTCTCCCC GGTAACACTA GATTCTCAGG AATAGATACA ACACCTTCCA  
122201 AACTGCAGCT GACACCAGCT GTACATTGTA ACAAGACTTT TAAGATTAG  
122251 GAATGTCAGA GAGATATTAC CCACAGCAGT TACATCACAT CTGCTTACAG  
122301 TCTGGCTGTT CTTGGAGCCC AGAATTCCAG GCCTGTTCCA GGGTGTCCAA  
122351 TTGAGCTGTG TCCTTGACCT GCCTCGAGGC AGCTGAAGCC AGCTTGCCCT  
122401 GACCTCCAGG AGTAGCTGTT GCAGGCAGGC AGCTTAGCTC AAAATGAGAG  
122451 AAATATGGC TAATTTAAAC AAAAATGAAA ATAATTTTAA AAAGGATATT  
122501 GGATAGCTAC CAAATCCTTG GGATGGTTGG AAACCCAAAC TGGGAAGGTA  
122551 CTTGTTTAAA AACAATGACC AAATCACACC ATGGAACCTG TCCCGGAGGA  
122601 AGCCACTGCT GTGTCTGCCC GGGCATATAC AGGGCGGTGG CCCCTGGATG  
122651 CTGTGCAAG AACCATCCTT GTGACTGCTC CTGGAGTGGG GCATACCAAC  
122701 ATTGGTACCA CCATCCCTGG AATGGCTTCC ACAGGGTCCC TGTTCCTTTA  
122751 TATAACATCC AAGATATGTC TGCTCCTGCC TGCCACCCCA CCTCCCATGG  
122801 AAGCTCCCCG CTGATGCTTT CACTTCCATC TTGATCAAGG GCAAGGTTTA

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126001 AGAAAATGCA TACCTGTTTG TCATTACCT TTATTCCTGG GCCTATAGAT
126051 AGTTCTTCTG TCTAGTAGCC TCTGGGCTAC TCATGGGAGT GGGGATAGGG
126101 ATCATATGAC AACTTTCTTC TCTTTTACGT GTTCTGGGTA CTCTTGGATA
126151 CTGGTTCCAG GGAACAGCTG CATAGCTAAG AGATGGGTGG GAAGGACAAG
126201 AAAGAGTAAA GTGTTCCTAG AGGAGCCAGC GAGGCAAGGG GTGTTTTACT
126251 GACCTAGTCT GTTTTATGGC TACATGAGAA CCCTAACACT GCTCTCCCCT
126301 TGCCCTGGGT GCTTTTCCAG GTTCTGTGCC TTCCCAGACA GCTCTAGCCA
126351 GGGCTCAGGG TTCCTTAATG GCTGTCCCAA TCCACTCTTC TTTTAGCAGA
126401 GCACCCTTAG CAAGAAACCC ACTGTAATCT CACCCTACTT TTCTGCTTTT
126451 ACAACATGTC TTCCTTCCGG GTGAACATTC ACAAGCTAAA GAAGGGAAC
126501 CACCTTCCCT TGAGGAGAGC TTGCTGAACA CCAGAGGATT TCACCTCTTT
126551 CCCCCTTCAT AATGGAATAA TCACTGAGCT TTCTGCTAGA ATAAAAAAT
126601 CATGGGCCGG GCACGGTGGC TCACGCCTGT AATCCCAGCA CTTTGGCAGA
126651 CCGAGGCGGG TGGATCACTT GAGGTCAGGA GTTCAAGACC AGCATGGCCA
126701 ACATGGCGAA ACCCCATCTC TACTAAAAAT ACAATCATTG GCTGGGCGTG
126751 GCAGTGCGCT CCTGTAATCT CAGCTACTCG GGAGGCTGAG GCAGGAGAAT
126801 CGCTTGAACC TGGGAGGCGG AAGTTGCAGT GAGCTGAGTT TGCGCCACTG
126851 CACTCCAGCC TGGGCGACAA AGTGAGACTC TGCCTCAAAA AAATAAAATA
126901 AAATAAAATA AAATAAAATA AAATAAAATA AAATAAAATA AAATAAAATA
126951 AAATAAGACA AAGGAGATGA TAAATTAAAG CCTAACATTA CTATATTCCC
127001 TTTATACTGA AGAATATGGT TTATATCTGT GGAAAGATGA GTTTCCTAAT
127051 ACAACCTCAG AATTAGATAG GAGATCACAA GGGGTAACCTC CCAAAAGGAA
127101 GGGGAGAGGA AGGGGCTGGG TTAACAGTTC CTGGGTCAGA ATAAGAGTTG
127151 AGTGGCCATG TGTATTGCAG CAGGTGGAGC TCCCTATACA AGGAAAGCAC
127201 TGGGGCGGAA AATGAGCATT TATCCTATTA GAATGGTCTT GTGCCCTCAC
127251 TCCCTGTGCA CTGCTTAGCC AGGGAACGTG GCCCTTACAC CTTGTTAGCC
127301 AGTGGGAAGAA GAGTGAGTCT ACCTTTTAGC TGTCTGTAGC ATTGTACTG
127351 TAGTATTATT GTATGCTTCT GTTTATGATG GTGGAGAGGC CATTTGAGAT
127401 GGAGGCATTG TTCATCATGC TGCTGAAATT TGAGTAGGAT AAATTTAGAA
127451 TTTGGATAGG TGAGCAGCTG GGAGGGGCAT CTTTGGGAT TGTCAGGAGT
127501 TACTCAGTTG ATGTGGCTCA TCAGCAGGTG TCCCATTCTC CTTACCTTTC
127551 CATGGGCTTT CTTTCATGCT TCAACCAAAG AGAAGGACCC TTCTTCAGTT
127601 AAGGATTTGT CTGGATGTTT TCTACATGTG GTGTGATCGC TTATGAGTTT
127651 TCCTGCCTCT GAGACCTACC TTCTGAATGC CTGACTGACA AAGATTTAAA
127701 GGTGCTCCAT TACAGTTGGC ATGCTTTTAT ATTCCACATG CCAGAGCTAC
127751 AAGAATGTTA TTATTTCTTT TCTTCTCTCC CAGGTGATAT ATTTGGTCAC
127801 CTAGGTGTCA TTAGGTACTA AGCTTTGCCT TCAATATCTA CCAGGTGGG
127851 GCACCATGGA CAGTGCCACA AAGACCTTTT CAGACAAAGG CTCAGATCTT
127901 CCTGCTGGAC TTTGTGTGCA AGAGGAAGGA ACTTTTCTTT TTCTTTTTC
127951 CCGTCTCTCT TCTCTCTCTC TCTCTCTCTC TCCCTTCCCT CCTTCCTTCC
128001 TTCTGTTTCT TCCTTCCTTC CCTCCCTCCT TCCCTCGAAC TGCCATGTCC
128051 CTTGCAACTA GAATGGTCCC TGACATTTAA GGTTTTAAAT AATTATGTGC
128101 AGAATGAATT AAATGCCAAA TCTTGTGTTC CAATAGCGTA TTATCTTCAA
128151 ATGTTAACAG CAACCAGTTT TTTAGAATAG AAAACTTTTG AAAATTTTAA
128201 TTAAAGTCTT CCTGCAGTGG AACAGTTGAT TTTTTTTTTT TTTTTTTTTT
128251 TTTTTTTTTT TTTTTTTTAG TCGGAGTCTC TCTCTGTGTC CCAGGCTGGA
128301 GTGCAGTGGT GCAATCTTGG CTCGCTGCAA CCTCTGCCTC CCGGGTTCAA
128351 GTGATTCTCC CTGCCTCAGT CTCCTAAGTA GCTGGGATTA CAGACATCTG
128401 CCACCATGCC CAGCTAATTT TTGTATTTTT TAGTAGAGTT GGGGTTTCCC
128451 CATGTTGGCC AGGCAGGTCT TGAACCTCTG ACCTCAGCCT CCTGAAGAGC
128501 TGGGATTACA GGTGTGAGCC AGCATGCCTG GCCTGAGTTT TTATTATTTG
128551 TGAATTTTAT TTTTTCCTAT CCCAGATGCA CCTATATTGG TAGTCTAGTG
128601 ATAAAAACAA TTTACCCATA TATACCAACA TCTTTTTCAT GAACCTTGCA
128651 TAGTGAAACC AGCAAAGTAC TGAACGGCC AGTCTGTCAT AGGTGTCTTG
128701 CAACATGACT CAGAGTCAGA AGCTGGATAT AAACCTTTTT CTGTGTGTGT
128751 ATATATGATC CATTGTGTGA TTCGGCTTTT GAGTGGGACT TTTTCAGTAG
128801 GCTTCTTGAA GGTTCACACT CACTATTCTC ACTGATGTGT GCTTACAGCA
128851 TCTCTGCCAT GGAGATTTTA GGCAGAGAGT GTTTAAAAGC TCTACTCATA
128901 GTTTATAGAA TTGCTAGTGC CACAAGGCCA TTCATTGTGG ATGATGAAAT
128951 TATTAGTTAT AAGTGAACCT TCTAAAATAA ATCTTGGGAG AAAACATGTT
129001 ATAAGAAAAT GAAGTCAGTC CTCTTACTAG GCAGTTCCCA TCATCTTTCC
129051 ATTTTGAGAA ATTATCCTCA GTTCAGATGT ATTACTATGG TGATGTGTTT
129101 GCATTTCAAC AAACCAAACC AAGCCGTAAA CTGAGCTCTG CATGTTTAGC

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129151 TTCTGTCTTA GGATTTTAC CGCAGTGTCT TTATTCTTGA GTAAAATCCC  
129201 CGACATCCTG GCTAGAAATC ACAATGAATA AATAATTTCC CAGCCAGACA  
129251 AAACAATCTG AATTGCTAAT CTCAGAATTC TAAGAAATTA CATAAAGATG  
129301 CAAACAATGG GGATTAAGA GGGGGTAAAA ATTAAATGAA AAAATAGCCC  
129351 ACAAATGAAT GGAATATAC ATGCTCTCCA AAATAACATT GTGGAAGTAA  
129401 AAAAAACAG ACAGAGAATT ATGCTTAATG AGAATTGGAC ATGTGGCTTA  
129451 GCCCTCTGAG GCCTGAAACA AGTAAACACT TCCCGAATTG TCAGTCCATA  
129501 CATCCCTCTC TCAAAAGAGA GCTCTTAGAA CTGGCTCCCT CTCCTCCTGT  
129551 TTACGAAGCT TACTTGGTCT TTGGAACAAT TGCACATATA ATTTTAACAA  
129601 CTAAATGAAC TCTACAGGAG ATGGGTTTTG AGTACTTAAA AAATTCCTAT  
129651 AGTTTGTATC AATCAGATAC GGGAGATAGT TTTGCAAAAT ACTGTTTGTG  
129701 TAAAGAGAAG GGAAGAACAT GCGCTCTAGT CTAACCAATC AACAAAGTGT  
129751 GAAAACACGA TTTAGACAGA AGTACAACGA CCATCCTATC AGTTCTACCC  
129801 AAATATCATA TCAGACCATC TCTTCCTGA TAACAGTTTT GTTAGCCTAA  
129851 GGACACATTA GCTCAGTTAG ATCTGGGCTC TCACAGAGCT TTCTGCTAGC  
129901 GGCTCTGCTT ACTGGTAAGT AAGCCATGCA ATTTTGCCTA GCAACCCAC  
129951 CGTGGAACA CAGCTCCATT CTGTAAGTGG CAGGGGGATG TGGCAGGGAG  
130001 GCAGGGAGAG TGAGGTTTGT GCCTCTCAGA ATCCCTCTGC AGCTGGTTCC  
130051 TGACATCGCA AACGTTATCT GCAATTCTTG GCAGTTTCGG AAGGATGATG  
130101 AAAAAAGGGA CGGGGAGGTG CGTGAGCCTG GGGTTTGGGA AGTAGGATGG  
130151 AATTAAATTGG AAGGCAATA AAAAAAGCTTC CAAGATTGTG AGCTGCCACT  
130201 GTCTGAGAGC TCAAACCAGA GTTGGCAAGA GGAACCAAAG GAGAATGAGG  
130251 ACATTTTTTG TCATTGACAA TGAGGTATAC AATATATCCA GGAAAGGACA  
130301 ACCAGCAGCG ACCTCCTGAA GCTAAACAGA GATTATCTTA AGCCACATAT  
130351 GAGGGAACAT TCCTCAATGG CAAAGAGAAG CATTAACCTT GGGACTGTCT  
130401 ACGTCTAAGG AAAAAATTGA GCATTTACAT TAAAATGGCC TGTTAACAAG  
130451 CATTGAATAT TAACCAGGCA CTGTGCTAAG TGTTCGCACA CTTGTTTAAT  
130501 CTTCCTAACCA ATCCGATGAG GTGGGATTTC TTATCTCCAT TTTATAGAGG  
130551 AAAAAAATA ATGCACAGAG AGGTTGAGAA ACTTGCTTAA GGTCACTCAG  
130601 CTATTTAGCA GTGGGGTTGG GATGTGTCTC AGGCAGTCTT TCCCTAGACT  
130651 CTGTGCTCTT AAACACTACT ATGGTTTTTC AGCAGCAGTG AACAGTTACA  
130701 GGGCTAATGG GGATAAGAAA ACTGAAGATC ACCACACGGC ACATGAGATG  
130751 GTTTGTGATT CCATTGTGAA AGCTGCAGTT TAAAATGTTT AATTAAAGCA  
130801 ACTTTTTTTT TTTTAAATA CCTAGAGGGC AGCAAAAACA TGGGTATCTA  
130851 GAATAACAGA TATTGCTAAA ACCTTACGCC CACAGCACTT CTTTTTATAG  
130901 CAAAGTATGG GTATACACAT ATTTTCATAC ACCTACACAC ACATACACAT  
130951 GCAAGACGCG CATTTCTTAA GTCCCTAAAA TACCCTGATA ATTAATGCT  
131001 CCAAACATTC TCTGAGTGTG ACCCTTGGAT GTCTAGGAGA AGCAGCCAG  
131051 GAACACACTT GTTAGCCGGG GCAATGAGTA GTGGTGAAAT GTTTACCTTG  
131101 CTGATAAAGT CTCAGTAGA TGATGCAATT AAGATGCCAC GATCTAGCCT  
131151 TTGTTATACA CCTCCTTGTC TGCCGTCAAA CAAATCCACC GCTGTCTTTC  
131201 CCCATCTTCC CTCCTGCCCA TCTCCTGAAG TCCAGGAACG TCTCCAGCTT  
131251 CCTACGTAAT TGCAGTCTCT TTTTGCCAAC CTCAACCTCA TTTAGATTGC  
131301 AATTACATTC ACATCTTAAT TTATGACTTA ACAAGCATCT CACAAACATT  
131351 TAATTCACCT TAACCTCACT ATGCATTTGA GGAGGAATAT TTGAGGAGGA  
131401 ATGGTACTCC CATTGCCAGC AATTAGATTG ACTTAATGAT CTATGGCGAA  
131451 ATCTCCTTTT GGCTTTTGA CTTTTCATAC ATTTCTGCAA ACAAACCTAG  
131501 GCTAATTAAA GTAAGTTCCT GGATTCTCAG AGGGGCTTAC CTGCCTTCAC  
131551 AAAATCCTCC TGTAATATCC AACATGGAAT TTTATGAAAT AGACAAAAC  
131601 TTCCCTGCAG TTTTCAGGTA ATTTATCTTG TTACGACACT TTCATGTGTG  
131651 GAAAAGTCGA TATTTTCATA TATAGTTTCA ACAATATCAA TAAATGTAA  
131701 TTTTTTTTTT AGATGGCTTC TCTGAGGAGA TTAGGAGGGT TTCTATATCA  
131751 AAGCATAGAT CAAATTATTT TTCCCTGTTT CCATTTTATA TACCAGATGC  
131801 CTTCTTAGGA GTTAGAAAAG TACCTCCTTT TTACAAGGAA GGATGGCATT  
131851 TCTTTAGCTT TTCCTGGACA GATCACCCTG TGACCATTTT TTATTCTCAG  
131901 TCTTCCTTCA CAGAAGGGAC AGAGGACTGC CCATTTTCAG CAGGAGTTAG  
131951 TCTGATTTCT TCTGTTAGAT GCAGACGACT TTGTTTGACA ACTTTCTTTG  
132001 GGTTGGTGAA TTGTTGAATT ACTTGAAAAG CTGTTTCCGT TGTAAAGCAC  
132051 TGGACTGAGA ATTAATTACA TCAGAATTCT AATCTCGGCT CATTAGTGGC  
132101 ATCATTTTAT GCAAGTCCCT TAACCCTCTT TGGCTTCAGT TTTGCATGTG  
132151 TAAAATGAAG TATATAAAGC AAAGGTCTCT CTGTGCTTGG TGCGATGAAG  
132201 AGGATGCAGG TCTCATGGTA CGGATTTCTT ATATTGATTG CCCCAAATGT  
132251 GGTGTACGTT TGCAGAAAAT TCATCTAGGC AATGTAGAAA GGCCATACAT

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132301 TCTGGTGTTA AACACATCGT TCATATATTT ATGCTAGTAT ATGATACCAG  
132351 GGCCTCCTGA TGACAGTCTC CAGCACCAAT TCTGAGAATT GCGAGGATT  
132401 TTCAGCTTAG AGTTTTTCAG CTTAGAGTCA ATTCCAGTGT CGCCTTCAGC  
132451 ACATCCAAAG AGAATATGAC CGATGCTACC AGTCCTGCTC CTGGACTCCA  
132501 CTGGTATGAT TCCTTTGCCC CAGTATCAGT CTAATTCCCA TTCTAGATGC  
132551 TTTTTTCTTA ATGACCCAAC AACTGACTCC TTCAGGAGCT GGCATGAGAT  
132601 GAGATTTGTT TGCAGAGATG TATAAAAATT TCAAAGCCCC AAAGGAGATT  
132651 TCACCACAGA TCATTAAGTC CATCTAATTG TCGTCCTACT ACCCATTTAG  
132701 ATGGGGACCC TGTATGCTA ACTCCTATCC TGTCTCTTGT GAGTGATACA  
132751 GTCAACACAC ATGATGATCA CAGCACCAGC TCAGACAGGT GTGTTTTAAA  
132801 ACAAAGTGT GTTATAAATG TACAGCCTCA GCAGGGAAAA TGTGGGGGCG  
132851 AAGAAACACA CAAATACTTG GCTAGAGTCG GTCACAGGTG AAGATGGGGA  
132901 TGACTGTGTT TTCCGTTTCA TCCAAACATT TTGGCCTGAC TCAGATAATT  
132951 TTTTTTCCAG CATATTCTGT TTGACACAAG GGAAACGGTG CAAATCCATC  
133001 ACCACCATTG TGGAAAGAGC TCCAAACTCA TTCTCACGAA TGGTGGATCA  
133051 GTAATACTAC ATGACAAATG GTAGCATTTT TGGGAAACCA TTATATTTGC  
133101 ACCAGTGAGA AGTCAGAATC AGCATTGTTGG CTGCAGTCAT GGAACCATGC  
133151 AAGAAACATT CAAAGCATTG GCTAAGCAGG ATTTTTTTGT TTGTTTGACC  
133201 TGGTGTCCAC GAACAGGCTT CAGGGAGCCT GAGAACCTCC TAGACCACTT  
133251 GAAAAATTCT GAATGCACTT TTCTAGGAAA GAGTTCACAG CGTTCATCAA  
133301 ATTTCTCCCA AGCAGCCAAT GACCAGAGAA AGGTTAAGAG TCACTGACAC  
133351 AGTACCGTTT TCTGTGCATC TATATCCTGA ATCCAGGGTG ATGCCGCTGA  
133401 CTTGCCTATC TTTCTCCTTT GGTCTTCCTA GAAAAAGCAA GTGAGTCAGA  
133451 CCAAGATCCG GGTTCATCTCA ACCATCCTGT TCATCTTGGC CGGCTGCATT  
133501 GTGTTTGTGA CGATCCCTGC TGTTCATCTT AAGTACATCG AGGGCTGGAC  
133551 GGCTTTGGAG TCCATTTACT TTGTGGTGGT CACTCTGACC ACGGTGGGCT  
133601 TTGGTGATTT TTGGGCAGGT AAGCACCTCG GGCAGGCCAG GCCTGGGGC  
133651 TCTGGCGGGA AAAATAATCT GTTGGCTGTG CTTTTGCAA TCGATAAAAG  
133701 ATGTTGCGGG AGAAGCAAAT GAAGATGACT CAGTGTCACT ACTGCTGTGA  
133751 AGAGGCTCAT TTCAAATCCC TAGTCCTATG TAATATAAAT ACCATAGGTT  
133801 TTTTCTGCT ATGAAAAGAA AGCCAACCTT TTCCTTCTCA GGATGCTTAT  
133851 TTCCCTTATC GTCACACAAA TTATGCAAGA CTAAAGTGAA TTTCTCATT  
133901 AATCTTGAAC TTCTGAATTG AATTAAACCT CTCTAATCCA ATGATAAAGG  
133951 CTGTGTTAGG AAGTGGCACA TAGGAAACTC AGATGAGATT AGCATAGAAT  
134001 TTGGTCTGCA GTGACCTGCA GGTTCAGCTT CCTGACTCCC AGGTGAGAGC  
134051 CATTGTCTCT GCAAACGTTG TCCTGCACAT GCCCAGATAC AAAGCTGAGG  
134101 ACTTTGGTGA CTATGGGGAG CTGAGAACTG CCCAGAGGGA ATATAAGCTC  
134151 ATGGATTATG CAGGAGTGTA TATACAAGCA ATAGCCTTCC TTGTAATAAT  
134201 AAATGTGGAT GAGCTATGTT TAAGGAAGTG AAAAAAAT CATCAATTTC  
134251 ATCTAGGGCC AGGGAAATTG CAAATGAAAT GAGATTTAGT TTCATATGTG  
134301 CACCAGTTTC CCAAAAGTGT GGTAGAAAGG TACGGATAGA AGGAAGAGGC  
134351 CATCCTTCTC TTTTCTAAT AGGATAGTTC TAGATGTTCA GACAAGTGAT  
134401 CAGTTTCTAC TACAAGAAGT GAACACTTTG ATCAAACAAC TCTATCATCT  
134451 GTCACAAGTT TGAATGTCT GGATGGAGTG TGTGTGTGTG TGTGTGTGTG  
134501 TTTCTTTTAC CAGTTCCTGG TGAAGTGGCA GCCTGACCTG AGCCCTAAGC  
134551 AGACTGTTTT TTTTGTTTTT TGTTTTTTGT TTTGTTTTTT TTGAACAGGG  
134601 TCTCCCTCTG TTGCCCAGGC TGGAGTGCAG TGGTGTGATC ATGGCTCACT  
134651 GCAGCTCGG ACCTCTGGGG CTCAAGTGAT CATCCCACCT CAGCCTCCTG  
134701 AGTAGCTGGG ACTACAGACG TGTGCCACCA TGCCTGGCTA TTTTTTATTT  
134751 TCATTTTTTG TATTTTTTCGT AGAGATGGGA TTTAGCCATG TTGCCCAAGC  
134801 TGGTCTTGAT CTGTTGGGCT CATGTGATCG GCCTGCCAAA GTGCTGGGAT  
134851 TACAGGTGTG AGCCACTGCA CCTGGCCAGA CTGTTCTTGT TTGGCGTGTG  
134901 ATCCCAGCAG TGTCTTGATT TCTCCATGGA ATACTGTGCA CATCAGGAGG  
134951 ATGGGTCTCG GTCTCTGGGA GTCTGGCAA CAGGAAATTC TGGAAGAGAT  
135001 TGCTGAAGGC TCATCAATAG GGGCATGCGT GCCTCCCTGT TAATTTTATA  
135051 ATACAAATAA CTGGCAGAGT GGTTTTGTAG CTCTTCCAAT TGGGCAGACA  
135101 AAGACTGAAT TCCACTTTGT AGAAATAATA GGGTTTTTTT TCCCCCTCCT  
135151 TTTTATTGGT TAAGGACTAA GAATTGCAAA GTGACTAAAT TTAGTTTTTT  
135201 TTAGCTTTTA ACTAAAAATT GATTTTTAGT CAGTGTGACT AAAATCATT  
135251 TACAGAAAGC CTGTAGCCTG GGACTTACC CATTTTCCCC TTACGCACAG  
135301 TGCTCAACCA TGGATGTCTA GTTAGTGGCC TCAAGCTCCG AAGAGAGACT  
135351 GTACAGAGAA ACTGAGAAAA GTAAGAGGAA CAGTTATAGA TGTATTCCAG  
135401 TTAATCCCTT GGCATCATCC GTAGCCGGTC CGTGGGAAAA CTCAGTGGTG

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135451 TTTCCAATCT AAGGCAAACA CATGTAGTGG CAGCTGGAAT TTTGAACTAT  
135501 TTCACAAACA TCTTTAAGTA TCCAAAGCAT AACCTGCAGT GGGTGGTGAT  
135551 TTAGAGCTCT CTGGGATAGC ACTGGGCTGT CCTGAGGACT GTCTATTATA  
135601 AGATACCTGT GACAGACACA GATCTCTAAC CAATGGCTCA GTTCAGTCTG  
135651 TTAATCTGAG GCACAAATAG CAGAGGCCTG GGAGTGAGAT TTTTAAAGTG  
135701 ATGCTTTTAT TATTTGTTAT CTACCATGGA CTGAGCACTT AGTACAAACT  
135751 AGTACTTTAC CTTATCTTTA CTTACCTAGT AAGGGCACAA CCTACACAGT  
135801 CCCAGGCATC CACAGTTTTA CTGCCCTTGT CAGTGATTAC AGAGCCATAT  
135851 TTCCTTTGTC CTGAGGTTTC TGTAGACCAC GGTCTCTTAA AAGTCACAGT  
135901 GCTGACTGCA GTTAGGCCAG ACCCCTTCCA AGTCCAGTT TTCCGAGCTT  
135951 ACACAGACCA ATCTGGAGAA TGCATGCCTG AAAAGACTGG AAGTTTATCT  
136001 CTATCTTTTG GTAACAGTCT GCGAGTGATA GGAAGGTTG CCCAATCATT  
136051 GGAAAACGAT ACATTAAACA GAGTTGATGG TTGCTGTGAT TCGACATAGT  
136101 ATGAACCTCAG CTAGAAATGT AATCAGATCA TTGATCCTGC AGGATTGATT  
136151 GCTGATTTAT TTTGCAGCTG ACTCACTTTA GGACAGCCTT ACAATATTTT  
136201 GCAACTCTGT CTGGGAGCAC ACACAGAACT CCGAATCCAG ATAAGCAGCT  
136251 CAAAAAGGGA TACTTAGAAG GGTGTTGACT GCCTGCTTCA TTGTTCTTGT  
136301 TTCACTAGCG CACCCTAGTG ACCATCTTTG CTGGGTAATA GTGACTTGCA  
136351 AAGGTAAATA TTTACTCCCA GATAGCCAC AGGAGAAAGC TACAGATTTT  
136401 TCTGGCGTAG CACAGAAACG AAATGAACCT CAAAAACCAC TTACTGGTGC  
136451 GGAACCTCAG ATCGTATCCT ACAGCTCTAA TGATGCAGGA GAGAGTTGTC  
136501 TGAAAGGAAA AACCAAAAGC AGCTGCACCA AACCAGAGGG GGCTTGGCAC  
136551 AGAGAAGTTG GAATTCTAAC GTTAAGAAGT GGCAGCAGCT GTCGAGCCTC  
136601 ATGGTCTGCT GCGCTGTGTT GCTGATTGGG TTTGAGCTTG TCGAGAGGAG  
136651 CCACAGGTCA CATTTCTTGC CCAGCTGCCT TTGCCGTAAG ACTCAGTGGC  
136701 GCTAGATGTG GTTACAACCT TGGTCTGGTG GGAAAGTCTG TAATCACTCA  
136751 TCACCTAATA CGATAGTTAC CAATCCATTG CTAGTATCTG TCATCTTAGA  
136801 AATGGCCACT GCCTGCTTCC TTAGGCAATA GCGTTTCCCA GAGAGAGATT  
136851 GAGGCTGATG TCCGTTATTT CCAGGAGCTT CCTCACTTCT TTAGGACGGT  
136901 GGGTTGGGCT TGCAACCTGT TTTGCATGGC TGCCTCCAGC AGTGTCTGTA  
136951 GGAAGGTTAG AATAAATAGG CTAATTATTC AGAATAAATG ACTGGTCCTT  
137001 TCAATGGAAC AGCCAGTCAA TGCAATCAGG CAACTGGCCA ATTTGGTTTG  
137051 ATGGATTTTT ACTGTAATCC TTATTTATAA AATAAAGGGA TTGGCCTCAA  
137101 AGGTCCCTTT TAGTCTTAGT TTATGGTGAC TCTAATTACT CAGCCTAACT  
137151 GACCCTTTGG AGTAGACTA TGTAACACC ATTCCTCAGT TAGCATTA  
137201 TCACTATTGC TTGCATCAAA ATCCCAGTAA TGCCATTAAA GCTAATTTTA  
137251 CTTTCACACA TCCACTTGTC TCTTAGTAAA TGTATGGGTG CTTAAGATGG  
137301 AAATGGTTCC AAGAATTCCA AACCATAGGG GGTGGTATGA TTATATTTGA  
137351 TTTTATTAA AATAAATTTA GAGAAGTTA AGAAAAACA ATGACAACCA  
137401 GGCCTGATCT GTTGTCTCTG AGTTCAGAGT TATTCATCCT TAACGCTCAG  
137451 GTCAAGCATT AGTAGGTCAA GTTGGCCACT GCGT'TTTTT ATTTCTGGTA  
137501 TTAAGGTTAG TGGTCAAGAA TCGAGGGAAG TAAAGCCTTA AGTTAGGCTT  
137551 TTTTGGGTAA GGGATGGGTA CCCCCCTTGC CCTCTAACCC CGGTCCACCT  
137601 TGTACACAGC AAACCTAACA GCTGAGTGTT AAACAATGAT GGATGACGTC  
137651 TTRACTACAT GGAATGGAAT ATGTGTTCTC TGCAAAGACC ATATGCTAGA  
137701 TCATGGTTAA AGTAACATTT GGTGTTTTTC AGGGGGAAC GCTGGCATCA  
137751 ATTATCGGGA GTGTTATAAG CCCCTAGTGT GGT'TTTGGAT CCTTGTGGC  
137801 CTTGCCACT TCGAGCTGT CCTCAGTATG ATCGGAGATT GGCTACGGGT  
137851 TCTGTCCAAA AAGACAAAAG AAGAGGTAGG ACCCCTTCCT AACCTATGA  
137901 ATGTTCCCTGA GAACAGATGA GCTTGTGTCC AGAATTGCCT GTCTCTGTCC  
137951 TGTGGGCTGG AGTGT'TCTG GCTCGGTTTT GCAGGGGGAG CGGGGGGCGG  
138001 GTCATAGGCT TCCTCATGTT GAATCAGTCC TTCAAAGCTA AGGAGAATAG  
138051 AATACAGTTA TTTCTGGATT CTTTTTTTGG CAGGTGAGAA AATATGGTGA  
138101 TTCTGTTTACC AGCCCATAAA TCCTGGAAAA ACTAGTAAAC AACAGCTGAT  
138151 TTTAAAAAAA TGAAAATGAA AATAAATAGG AGAGGTAGAC TATGGCTGAG  
138201 TGTGTGTGTG GGGGGGTGCA GCCTGTCTT CCGGTCTCAG GGTCTGTGCA  
138251 GAAAGGCAGT TGAACGCCAA GAATCTTTCC TGATTCACTA AGAACTGAA  
138301 ATCATCGAAC ATTGACCAGC TACGGGGAAG TGAGCCCAAT GGGCCTCTTT  
138351 CACTTATCCC CTCTTGGTTG TCACATCCAT AGAGACAAAT ATACATCCCT  
138401 GAGGAAGGGC CGTGCATGTA ACTTTACATG AAGGGAAGTA AAGGAAGACA  
138451 TATGAAGGAA AGATAGATTT TGTGATTAAA AAATAAATAT TCATGTAGCT  
138501 CTCTTAGGAA GAGAGGAAAA GAAAGGAGGA AGGCAAGGA AGGAGAAAA  
138551 AAAGAGCTAA AAGAAAGGAA GGGAGATAAG AAAAACCAAA GAAATAGAGG

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138601 GCCAGCCTCT GTTTGCTTCA TTCTGTATAA AAGGCCCCAG GAGAAAGTTG  
138651 CTGAATGGAG AGATTTCCTCA CATCAGTTTC CTGGGCCCCAT ATGCTAATTT  
138701 TCCTGGTTTA TATAAGTAAG CCAGGAAAGT AAGCAATGCA ATTTCCAGAC  
138751 CGGTTCCCCA GACAGCTAAC TGACCTGCTG AAAATCAGCT ATAACAAAAG  
138801 AGAAGGGAAC AACATGAATA TTGACTTTCC TGGATGCACA AATTTGAGTT  
138851 CCTCATTTGC AGAGGGAAGC ATGGGACTTA TACTGTCTGC CCTGTTCAAT  
138901 AAGAGCCAAG AAATTTGGTG CTGATCCTCA GGCAAACTC CACTCTAAGG  
138951 AGGCCTGTTT TGTGGGCTTT GGCAGAATAG GCCGTCTTCC TGCACCCTGA  
139001 CTGGGGGAAG TGGGTTACCA GGTGCCCTGG AGCATCTTCT TAAACCAGGG  
139051 AAAGCCCCAC AGCACATGAC CATAGCATGG CCCAGATAGG GTGGCCACCC  
139101 ATCCCAGTTT TCCCAGGACT GAGGGAGTTC CTAGGACACA GGACTCTGTT  
139151 TTAAACCTGG GACAGCCTCA GGCAAACTGG AACAAGTTGG TCACCCTGCC  
139201 AGGATAGAAA ACCAGAAAGG CAGGGAGGGC AGAAGGCCTG CTGAACATCT  
139251 GCTGTGCCCA CGAGTGCTG AGGTGCATTT CCTGTGCTCA GGTGAGCTAT  
139301 ATATGGTCAC TCAAGTGTAT GTTGGGGGAA TGAGGCCATG CAATTGATAA  
139351 GAGAGAGCTG GAAGCCAGGC CTGTCCAAC CCACATTTTA ACCTCTCCTG  
139401 CAGGATGCCG TCCCCCTCTC TTTAAGTCAC CATCTCCAAA TCTGAGGCTT  
139451 CTTGGGGTTG CCCACCACGT GTGTCTCCCT GAGCCACCTT ATTTACTAGC  
139501 CAATTAGGGA TGGGTGTCCA GGTGGCAGAA GTACTAGGGC AGAAGGTAGC  
139551 ATTTGCACCT CCCCCCTGGG CATGTGCTCC GTCACCTCCT GGCCTCCCCG  
139601 TGGGGACACC CGAGGGCTGT GGGTGCTGGG AGGCCAAGGC AGGGAGGCAT  
139651 TTGTCAGCAT ATTGTTGCTC TTCTGTCTCT TGGCCAGGTG GGTGAAATCA  
139701 AGGCCCATGC GGCAGAGTGG AAGGCCAATG TCACGGCTGA GTTCCGGGAG  
139751 ACACGGCGAA GGCTCAGCGT GGAGATCCAC GATAAGCTGC AGCGGGCGGC  
139801 CACCATCCGC AGCATGGAGC GCCGGCGGCT GGGCTTGGAC CAGCGGGCCC  
139851 ACTCACTGGA CATGCTGTCC CCCGAGAAGC GCTCTGTCTT TGCTGCCCTG  
139901 GACACCGGCC GCTTCAAGGC CTCATCCAG GAGAGCATCA ACAACCGGCC  
139951 CAACAACCTG CGCCTGAAGG GGCCGGAGCA GCTGAACAAG CATGGGCAGG  
140001 GTGCGTCCGA GGACAACATC ATCAACAAGT TCGGGTCCAC CTCCAGACTC  
140051 ACCAAGAGGA AAAACAAGGA CCTCAAAAAG ACCTTGCCCG AGGACGTTCA  
140101 GAAAATCTAC AAGACCTTCC GGAATTACTC CCTGGACGAG GAGAAGAAAG  
140151 AGGAGGAGAC GGAAAAGATG TGTAACCTAG ACAACTCCAG CACAGCCATG  
140201 CTGACGGACT GTATCCAGCA GCACGCTGAG TTGGAGAACG GAATGATACC  
140251 CACGGACACC AAAGACCGGG AGCCGGAGAA CAACTCATTA CTTGAAGACA  
140301 GAAACTAAAT GTGAAGGACA TTGGTCTTGG ACTGAGCGTT GTGTGTGTGT  
140351 GTGTGTGTGT GTTTTAAATA TTCACACTGA GACATGTGCC TTAAACAGAC  
140401 TTTTTAGTCC AAAATTACAT AGCATTGAAG AATATATTTT ACTGTGCCAT  
140451 AAACAACCTA AAGCTTGCTC TGCCAAAAGG AATCAGAGAA CAAGAACTTC  
140501 ATTTCAGATA GCAAACGCAG GACACACCAA GAGTGTCCTG GCACGTAGCC  
140551 GGTCTGGGCC GTACATGTTA AGGGCATTTT AGTGGCAGTG CTGTACCCCT  
140601 GGGCAGTGCT ACCTGGGCAC ACACGTAGAC AAGGGCAGCT ATTCCTTAGA  
140651 CCAGCCTCCT GAAAGAAACA GGTGTGTCTT TTTAGTGGAG TCGTAGTAAT  
140701 ATGTGCACAC ACAGAAGGGG ACCTGATTGG GTGGGAGCTG GTTATGTGTA  
140751 ACTAGCGTTG GAGTTGACAT TTTGGCATGT GCTCTGAGCT TGAATTTTGA  
140801 TACCAACCAT TCAGTGCATC ATACCTAGTC TTTCTATGCT CCAAATGAAT  
140851 GTCTGTGGGG ACCTGAGAGC ACCTGGAATT TGTGGAAGC AGATCAGAGC  
140901 ACACGTACGA AAAGGTGCAA TTGCTTTTCT CATGACAAAA GAAAAAAAT  
140951 AATCACAAAC ACATCACACT GTGGATATCA CCTTAACCAA TGACAGAAGC  
141001 CTGCTGAGTT TGGTCTTTCT CACAGGGGTA GGTAGTCCAC ATGAACTGGC  
141051 GAGCAGTGGT GAAAACATGA CATCAACTGC TGCGTGGTTA AAGGCCAATC  
141101 ATGCATTTTC CTCAGTGGGT GCAATGGTGA CAATAAACTG ATTTGGAAAT  
141151 GTCCATGTAC TTTGGTTATA ACTTGTTTGG ATAAGAGGGG TAGAAATACC  
141201 AAAACAATTG CCTTGCATGA TGCCAGTGGC TTGCTGTTCT GTCTAGCTGA  
141251 TCCTACATTT TTACAAAAGT AGACATCCTG CATTTCTGAG ACACACTGAG  
141301 GAGGACCATG GCATCTTTCC ATCTCAGGGC TTTTGTGCCC TTGGGTGTCT  
141351 TAGGGTAGAC ATAGTGATAA GATCCAATCT CGCTATCTCC AAACAAAAG  
141401 AAAATGTACC CCTTGTACAG TAAGCTTGAA ATGTTTTTAT TGCTTGACAG  
141451 GTAAGTGCCA TTAATTCCAT TTAACAATGA TACTTAGAAA TATTTAAAT  
141501 ATTTCAATTT ACTTTTATGT TTGGGCATT CTTTATTCTG AAAAAGTCAC  
141551 CACTGCTCCT TGCTTGTTC TACATCTCAC ATCGGTTACT CACTAAACT  
141601 GGAACACCCT AGACTGATTG TTCCAGGCA AACGATAAGC TAACACATCA  
141651 TAATTATGAT TGGTCTGTGA GGCTAGAACA TCCCGCAGAG GAAAGTCGGG  
141701 GAATGGCTAG TCATAGGTTG CATGATGATT TTAAATGGGT TTGTATCAGA

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141751 AAGGGGAAAA TACATACTCC TGTGTATGCC TCAGTCTTTA TCATAATTGG  
 141801 CTGGTTCACA GCTAGCTCTT TGGGCCACAC GTGAAAGCAT TTGGACCTGG  
 141851 CAACACCAGG CAGTTGCTGG TTATGGGTGT TCTAGGCTCA CTGCTACCTT  
 141901 TTACAGAGTT CACGGGATTT TACGTAAC TAACCGCAGTG TGGATTTACC  
 141951 AAAAGATCAC AGCACTAGCG GAGACTTCCA GAAACTGTCT CATGCTTTCT  
 142001 GACCTCCAGG GAAAGTTGTA CCCACGACAT CCTCAACCAC TGGTACCATG  
 142051 GAAGACCTGT CCCTGCCCAT TTCTCAAAAA TGCACAGCTC TTCCTGCCT  
 142101 GGAGCACATG AAGTCCCATC TCCCTGTCCC CAGACCTTTA GGCTCTGTTG  
 142151 AAGTTCTGGC ATTGCTTATG AGACCCTTCC TGTCCAAGGA AGGTCTAAGT  
 142201 CAACTCCTCC ATTGGACTGG AGATGAGGCT CACTGGTGAC ATCCTGTGTC  
 142251 GACTCAGTAA TAAATAGTCA CTTGGGAGGC GATGTTTATG CAGGTGTGGA  
 142301 TGTTGAGTTT TACTATGGGA ATCATTCCAG CCTGACAAAA TGTGTTTTAA  
 142351 GGAATAGGTA GATAACTGGG ACTTCCTCTG TTATTCTAAC AAGTCGAAGC  
 142401 TTCCTAATTA AACTGTCCAT GGATCTCACT TATTGGTTT CCACTCTGTG  
 142451 TTATCTGGTA CGTTCTTTGT AGCAGTGTGT TAAAATTCCA GGCCCTACGG  
 142501 CCAAATCTGG CAGAGGCTTC CCTCTCATTT ATCCAGTGCC TTCTGTGGGC  
 142551 CAGGCACAGG ATTAGGCACT TTATGAACGT CAGCTCATTG AAACCTCACG  
 142601 ACACTATGTG GGAAGTATTT GCAAACCCAT TATATACACA AGGACACAGA  
 142651 GGCTCAGGGA AGCTATGTTA TTTATCCAAT GGCACACAGC AAGAAAGTGG  
 142701 TAGAGCTGGT ATTCAAAGTC TGACCAAAGT CTGCTTTCAA CTCCTACA  
 142751 GTGTCTGTGT CATGCATCCT TGTGATTGTG TGTGTTGTG TGTATGTGTG  
 142801 TCTTTCTAGC TTCATGGACA CAGCTTACAG ATGTGGGGAG CAGATATGGT  
 142851 GGAATCTCCA CCACCAAGAG GGCACAAGGT CTTTGTGTAA ACATGGCTCA  
 142901 AAGGGTTGCC CCTGCAGACA CCTACTGTAC ATTTATTTGG TTTTGAAAT  
 142951 TTTGTATGTG GCACCCCTTA AAAAATGCCC TTTGAAAGCA CTCTTTTGCA  
 143001 CTTTACTTGC TAACTTTGTA GAAACTCTGC ATACAGCAGG AATAAAATAG  
 143051 TTCAAAGCAC TAAGCTGCAT ACTCTACCAA ATGGAACAGG TGCATGTGTT  
 143101 GGTATGTGCA TAGATGCTTC CCCAAATGAG TCAAATCAGT CACACAGAGG  
 143151 GATCAAACAT AACCTTGGGC TGGGGGTGGG AAAATTTTCT ACATAACCCA  
 143201 TTCCCTGAGA CATTTGGCCA AGAATGTGAT GAACAAAATC AAAGAAGATC  
 143251 CTCTATGGTG ATTGATCGAT TAAATATGTG TGCAAAGTGT TTAGAAACCT  
 143301 ATGAAA

#### FEATURES:

Start: 3000  
 Exon: 3000-3051  
 Intron: 3052-62251  
 Exon: 62252-62601  
 Intron: 62602-84982  
 Exon: 84983-85100  
 Intron: 85101-98275  
 Exon: 98276-98436  
 Intron: 98437-133431  
 Exon: 133432-133618  
 Intron: 133619-137732  
 Exon: 137733-137875  
 Intron: 137876-139687  
 Exon: 139688-140305  
 Stop: 140306

#### CHROMOSOME MAP POSITION:

Bac accession #: AC026597  
 Chromosome: 18

#### ALLELIC VARIANTS (SNPs):

DNA				Protein		
Position	Major	Minor	Domain	Position	Major	Minor
981	G	C	Beyond ORF(5')			
1012	C	T	Beyond ORF(5')			
1990	T	G	Beyond ORF(5')			
3432	C	T	Intron			
4658	T	C	Intron			





32490	T	C	Intron
32526	G	A	Intron
32893	A	G	Intron
32900	G	T	Intron
33087	A	G	Intron
33474	C	G	Intron
33474	C	T G	Intron
33474	C	T G	Intron
33741	C	G	Intron
34043	G	A	Intron
34053	C	T	Intron
34297	A	C	Intron
37209	T	C G	Intron
37475	G	T	Intron
38476	A	G	Intron
38486	C	T	Intron
38576	A	G	Intron
38810	A	G	Intron
38825	A	C	Intron
39317	C	T	Intron
40519	A	G	Intron
41468	A	T G	Intron
41468	A	C G	Intron
41565	A	C	Intron
41625	A	T	Intron
41921	G	C T A	Intron
42152	C	A	Intron
42498	G	T	Intron
42715	T	G A C	Intron
42776	T	C A	Intron
43320	G	T C	Intron
43341	A	T	Intron
43424	A	G T	Intron
43509	A	G T	Intron
44584	C	T	Intron
46250	A	C T G	Intron
46287	C	T	Intron
46566	A	C T G	Intron
46653	G	A	Intron
47153	T	A	Intron
47171	C	T	Intron
47216	A	T	Intron
47484	T	C	Intron
47668	G	A	Intron
47698	C	T	Intron
48029	A	T	Intron
49334	A	G	Intron
49680	C	G	Intron
50056	A	G	Intron
51020	A	T G C	Intron
53750	G	T C	Intron
53753	A	T C G	Intron
53799	C	A T	Intron
53917	C	T G	Intron
54056	C	T	Intron
54402	G	A	Intron
54493	G	A T	Intron
54749	T	C	Intron
55396	-	C	Intron
55397	-	C	Intron
55703	A	C	Intron
55783	G	A	Intron
55806	A	C	Intron

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57433	G	T	Intron
57699	T	A	Intron
60173	C	G A T	Intron
62216	C	A	Intron
62830	G	C	Intron
63395	G	A	Intron
64019	T	-	Intron
64030	T	-	Intron
64104	C	A G T	Intron
64166	G	T	Intron
64408	A	G	Intron
64786	C	T	Intron
65120	A	G C	Intron
65703	C	T	Intron
66930	C	G	Intron
66951	T	G	Intron
68094	G	A	Intron
68124	A	G	Intron
68787	A	G	Intron
69668	C	A	Intron
69701	A	C	Intron
69773	C	T	Intron
70257	-	T	Intron
70261	-	T	Intron
70268	-	T	Intron
70941	G	A T	Intron
71359	G	T	Intron
72550	C	T	Intron
75313	T	A	Intron
75541	G	T	Intron
75957	T	G	Intron
76415	A	C	Intron
77872	T	A	Intron
78058	A	C	Intron
79799	A	G	Intron
80598	G	A	Intron
82609	A	G T	Intron
83645	A	G	Intron
83756	C	T A	Intron
84687	A	C	Intron
84761	C	T	Intron
84911	-	T	Intron
84921	-	T	Intron
85786	C	T	Intron
85903	T	-	Intron
85906	T	-	Intron
85908	T	-	Intron
85913	T	-	Intron
85932	A	-	Intron
86085	C	A	Intron
86585	T	-	Intron
86596	T	-	Intron
86601	T	A	Intron
89478	-	T	Intron
89488	-	T	Intron
91631	A	G	Intron
91898	G	C	Intron
93506	T	C	Intron
94409	T	C	Intron
94689	T	A	Intron
94856	G	A	Intron
95303	A	G	Intron
95373	G	A	Intron



2000 1000 500 250 125 62 31 15 7 3 1 0.5 0.25 0.125 0.0625 0.03125 0.015625 0.0078125 0.00390625 0.001953125 0.0009765625 0.00048828125 0.000244140625 0.0001220703125 6.103515625e-05 3.0517578125e-05 1.52587890625e-05 7.62939453125e-06 3.814697265625e-06 1.9073486328125e-06 9.5367431640625e-07 4.76837158203125e-07 2.384185791015625e-07 1.1920928955078125e-07 5.9604644775390625e-08 2.98023223876953125e-08 1.4901161193847656e-08 7.450580596923828e-09 3.725290298461914e-09 1.862645149230957e-09 9.313225746154785e-10 4.656612873077392e-10 2.328306436538696e-10 1.164153218269348e-10 5.82076609134674e-11 2.91038304567337e-11 1.455191522836685e-11 7.275957614183425e-12 3.637978807091712e-12 1.818989403545856e-12 9.09494701772928e-13 4.54747350886464e-13 2.27373675443232e-13 1.13686837721616e-13 5.6843418860808e-14 2.8421709430404e-14 1.4210854715202e-14 7.105427357601e-15 3.5527136788005e-15 1.77635683940025e-15 8.88178419700125e-16 4.440892098500625e-16 2.220446049250312e-16 1.110223024625156e-16 5.551115123125781e-17 2.775557561562891e-17 1.387778780781445e-17 6.938893903907225e-18 3.469446951953612e-18 1.734723475976806e-18 8.67361737988403e-19 4.336808689942015e-19 2.168404344971008e-19 1.084202172485504e-19 5.42101086242752e-20 2.71050543121376e-20 1.35525271560688e-20 6.7762635780344e-21 3.3881317890172e-21 1.6940658945086e-21 8.470329472543e-22 4.2351647362715e-22 2.11758236813575e-22 1.058791184067875e-22 5.293955920339375e-23 2.6469779601696875e-23 1.3234889800848437e-23 6.617444900424219e-24 3.3087224502121095e-24 1.6543612251060547e-24 8.271806125530273e-25 4.135903062765137e-25 2.0679515313825685e-25 1.0339757656912842e-25 5.169878828456421e-26 2.5849394142282105e-26 1.2924697071141052e-26 6.462348535570526e-27 3.231174267785263e-27 1.6155871338926315e-27 8.077935669463157e-28 4.038967834731579e-28 2.0194839173657895e-28 1.0097419586828947e-28 5.048709793414473e-29 2.5243548967072365e-29 1.2621774483536182e-29 6.310887241768091e-30 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1990

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3432

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4658

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4772

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7738

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GGGGCTTAGCTCTACATGGCATGTTTACAGAATCTACCTAACCGTGGCACTAGGAGTGTG  
GTCACCCTGTTGGTTCACCCACCTGGGTGATTCTCTCCATAAGAATCATGGAGGTCAA  
AGGGACCTTCCACTTCTGGGTCTGGTCTAGGGTACTCTCAGCGGAGACTTTACAGTT  
TATCTATGTCTGGCTCATTACCATCACCTACAATGGGGAAATAAAGACCTCATATTTACT

9192 CTCATTAGGAACTTCAACCACAAGTATGATATGGTGTGAAGTATATTTAATATAGGCAC  
AGTGAGCTAGTGATTTCTTTTACTTTTAGTCTACAGGAAATAGAGGAAGAGTTTAAAT  
GATAAAATGGAAAGAAGCCATTCTACTGATAGCCAGTTAGGAAGTTTTCAGTTTGGACAGC  
TCCCTTGGCTGATGCAGAAAGGTGGATAAAATGACAATCTTTTCTGTACTCTGATTCT  
TATAAAGGGCACCTACTGGATGATCCAGATGAGGTTAGAGTGAGTTAGGGGCTTAGCTCT  
[A, G]  
CATGGCATGTTTACAGAATCTACCTAACCGTGGCACTAGGAGTGTGGTCACCCTGTTGGT  
TCCACCCACCTGGGTGATTCTCTCCATAAGAATCATGGAGGTCAAAGGGACCTTCCACT  
TCTGGGTCTGGTCTTGGGTACTCTCAGCGGAGACTTTACAGTTTATCTATGTCTGGC  
TCATTACCATCACCTACAATGGGGAAATAAAGACCTCATATTTACTTGCTAGAACATCTA  
TTTGTCTATTTGCAGCCACAGTTTAAAGAGTTTTTTTTTCTCCCTGTGAGTGTCTAGGACT

9222 TATGGTGTGAAGTATATTTAATATAGGCACAGTGAAGTATTTCTTTTACTTTTA  
GTCTACAGGAAATAGAGGAAGAGTTTAAATGATAAAATGGAAAGAAGCCATTCTACTGAT  
AGCCAGTTAGGAAGTTTTCAGTTTGGACAGCTCCCTTGGCTGATGCAGAAAGGTGGATAAA  
AATGACAATCTTTTTCTGTACTCTGATTCTTATAAAGGGCACCTACTGGATGATCCAGAT  
GAGGTTAGAGTGAGTTAGGGGCTTAGCTCTACATGGCATGTTTACAGAATCTACCTAAC  
[G, A]  
TGGCACTAGGAGTGTGGTCACCCTGTTGGTTCACCCACCTGGGTGATTCTCTCCATAA  
GAATCATGGAGGTCAAAGGGACCTTCCACTTCTGGGTCTGGTCTAGGGTACTCTCAG  
CGGAGACTTTACAGTTTATCTATGTCTGGCTCATTACCATCACCTACAATGGGGAAATAA  
AGACCTCATATTTACTTGTCTAGAACATCTATTTGTCTATTTGCAGCCACAGTTTAAAGAGTT  
TTTTTTTTTCTCCCTGTGAGTGTCTAGGACTGAGTACTCTGAATTGAAAATGAAACCTGAC

9734 TTGTCTATTTGCAGCCACAGTTTAAAGAGTTTTTTTTTCTCCCTGTGAGTGTCTAGGACTG  
AGTACTCTGAATTGAAAATGAAACCTGACTTCCTAATCCTCCATTTAGGGTTGAAGGGAG  
GGAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCT  
TTTCCTTTTGCCATTCCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGGG  
GATGAGGCTGGGAGATGGATGGGATTTTCAAGAGATTTTAGGTTTTGTATTACCAATAACT  
[G, T]  
CTAGTCTCATCACTTACCCTTTCCATGGAAGTAACTTTGAAGCAGAGTGGAATGGTGGGG  
AAACAAGATTAGAAAGGAAACATAGGATTTACTGCCATACATAAGCCAGGTGATCACAG  
GGAACCTTTTCTTCACTTCTCCCTCCTTCTTTTCTTCACTTCCCTTGTTCCTCCCAACC  
GCCATCCCCCAAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTGCAAAGGGTC  
CTTTCTCCCTTACTCACTACCCAGTGTGGTGGGGCTGGTGGTATTACAGTTTAAAAAG

9795 GTACTCTGAATTGAAAATGAAACCTGACTTCCTAATCCTCCATTTAGGGTTGAAGGGAGG  
GAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCTT  
TTCTTTTGCCATTCCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGGGG  
ATGAGGCTGGGAGATGGATGGGATTTTCAAGAGATTTTAGGTTTTGTATTACCAATAACTG  
CTAGTCTCATCACTTACCCTTTCCATGGAAGTAACTTTGAAGCAGAGTGGAATGGTGGGG  
[A, G]  
AACAAGATTAGAAAGGAAACATAGGATTTACTGCCATACATAAGCCAGGTGATCACAGG  
GAACCTTTTCTTCACTTCTCCCTCCTTCTTTTCTTCACTTCCCTTGTTCCTCCCAACC  
CCATCCCCCAAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTGCAAAGGGTCC  
TTTCTCCCTTACTCACTACCCAGTGTGGTGGGGCTGGTGGTATTACAGTTTAAAAAGA  
GTTGCTTGAATAGAAAATGAAAATTTGGTGGGTGATGGAGAGCCTGGAAGTCACGGTAA

9853 GGGAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCT  
TTTTCTTTTGCCATTCCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGG  
GGATGAGGCTGGGAGATGGATGGGATTTTCAAGAGATTTTAGGTTTTGTATTACCAATAAC

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TGCTAGTCTCATCACTTACCCCTTCCATGGAAGTAACCTTTGAAGCAGAGTGGAATGGTGG  
GGAAACAAGATTAGAAAGGAAACATAGGATTACTGCCATACATAAGCCAGGTGATCAC  
[A, C]

GGGAACTTTTCCCTTCATTCCCTCCCGTCCCTCTTTTCTTCATTCCCTTGTTCCCTCCCCAC  
CGCCATCCCCCAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTCAGGAGGT  
CCTTTCTCCCTTACTCAACTACCCAGTGTGGTGGGGCTGGTGGTATTTACAGTTTAAAAA  
GAGTTGCTTGAATAGAAAAATGAAAAATTTGGTCGGGTGATGGAGAGCCTGGAAGTCACGGT  
AACCTTTGCAGACGCCTAAAAACCAATATTCATAATTTTGACATGCAAGCTAGCAACAA

10397 CTTTGCAGACGCCTAAAAACCAATATTCATAATTTTGACATGCAAGCTAGCAACAATTT  
TACTACCAAGAAAATGAGTTTCTTATGTGCAAGCAGAACTCGAGATCCCCTAAATAATCA  
CACACCAAAATATTTAGCATGATAAAGATAAATAGTATAGCTTACTAAATTTAATGTGATA  
TGAGCCTGACAGGCAGAATAGAGATGCTTGATATTAGGTGTGATAAAAGGTTTGACATCC  
AACATTCACTTACTTCGTCTCTGAGACAAAAGTCAGGCACCAAGTGTTTAAGAAAAATT  
[G, A]  
ATGGGAGGAAAAGCTTAGAGATGAATAAAGTCTATTTATTAATTTATATTTTCTCTGAG  
AACTGGGAGTGTTGTACCCATGTTAACTGTGGACTAACCTGGGCCAGCTCCTGGATTCT  
TACTGGCTAAGAATGTTGCTTTAGGCCAAAGGAATTTATCCCTCATGGTGGAAATTTGAGG  
CCATATGGGAGGTGATTATGATAGATCTGTTTCGGCCTCTACATTCTTACAATAACCTGA  
AAGGAGATTAAATACATGTTATAGTCATTTAACCTAGACTCCAGGCAAAATGTCACCCTC

11198 TCTTCATCTGCAAGATAGGGATAATTACAGCCATTACTTCTTTGGTTTGTTATGTGGATT  
ACATAAAGTGATACATGCAAAGCTCTTAGAAGAATGCCGGATCATCATGAAGGCTCCATG  
AGTGGTACCTGCCTTGTGCTGTTCTCACAGTTGCAGGAGGCAGCCTGTGAAGTCAGGGTA  
GCCTCCAGCTCAGCCTCTTGAAGCATCTGGTTCACTGTCTGGATCATCCAGGAAGTGGT  
CCATAGCAGAGCACAAACCTCCTGATACTCTGGAAGACTCTTAGTATTCTTAGTTCAGAT  
[G, T]  
TAAACAACCTAGGCTGTCTGGTTAACTCAGAGAAAAGACCAGTGAAAGAACATGGCTTG  
GAATCACAATATTTGAGTCTGAGTTAATGTACCCATTTTATTAGCAGTGTATCATAGTTG  
ATTTTCGGCTGCTTTAATAAAATTCATAAACTAGATAGATTATAGACAACAGAAATTTAT  
TTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCACCTGGTAGATTGGGCATCTG  
GTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCTTCTTGCTGTGCTTACACGGTAGA

11470 GAAGACTCTTAGTATTCTTAGTTAGATGTAAACAACCTAGGCTGTCTGGTTAACTCAG  
AGAAAAGACCAGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTA  
CCCATTTTATTAGCAGTGTATCATAGTTGATTTTCGGCTGCTTTAATAAAATTCATAAAAC  
TAGATAGATTATAGACAACAGAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAA  
GATCAAGGCACTGGTAGATTGGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGT  
[G, T]  
CCTTCTTGCTGTGTCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGA  
TAACTGCACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGG  
CCCCATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGGGGG  
ACACATTTCAGACCATAACACTGTGTGAACCTTGCCCAAGTCACCTAACCTTTCTAGCATT  
AGTTTTCTTTTGGGTAAAAATAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGA

11534 AAGACCAGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTACCCA  
TTTTATTAGCAGTGTATCATAGTTGATTTTCGGCTGCTTTAATAAAATTCATAAACTAGA  
TAGATTATAGACAACAGAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATC  
AAGGCACTGGTAGATTGGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCT  
TCTTGCTGTGCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGATAA  
[G, C]  
TGCACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGGCCCC  
ATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGGGGGACAC  
ATTCAGACCATAACACTGTGTGAACCTTGCCCAAGTCACCTAACCTTTCTAGCATTAGTT  
TTCTTTTGGGTAAAAATAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATCAA  
ATGAGACAAATGTGAATAAATTCATAAATGTTAAATTCAGACCAACATTTCCCAAAA

11540 AGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTACCCATTTTAT  
TAGCAGTGTATCATAGTTGATTTTCGGCTGCTTTAATAAAATTCATAAACTAGATAGATT  
ATAGACAACAGAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCA  
CTGGTAGATTGGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCTTCTTGC  
TGTGCTCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGATAACTGCAC  
[T, G]



AATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGGCCCCATCTCC  
TAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATCTGGGGGACACATTTCAG  
ACCATAACACTGTGTGAAGTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTT  
TGGGTAAAATAAAGATCACAAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGA  
CAAATGTGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTCCCAAATGTGTT

11557 TGGAAATCACAATATTGAGTCTGAGTTAATGTACCCATTTTATTAGCAGTGTATCATAGT  
TGATTTTCGGCTGCTTTAATAAAATTCATAAACTAGATAGATTATAGACAACAGAAATTT  
ATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCACTGGTAGATTTGGCATC  
TGGTGAGGGGCCACTTTTCAGCTCATAGATGGTGCCTTCTTGCTGTGTCTTACACGGTA  
GAAAAAGTGATGGGTCTTTCTTGGCTTCTTTGATAACTGCACGAATCCTAATCATGAAG  
[C, G]

CTCCATGCCCCATGACCTAATTACCTTCCAAAGGCCCCATCTCCTAATAACATTACCTTTG  
GGGTTAGGATTTCAACATATGAATCTGGGGGACACATTGAGACCAATAACACTGTGTGA  
ACTTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTTGGGTAAAATAAAGATC  
ACAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGACAAATGTGAATAAACTT  
CATAAACTGTTAAATTCAGACCAACATTTCCCAAATGTGTTCTGTGAGACATAAGCTA

11708 AAGATCAAGGCACTGGTAGATTTGGCATCTGGTGAGGGGCCACTTTTCAGCTCATAGATG  
GTGCCTTCTTGCTGTCTCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTT  
TGATAACTGACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAA  
AGGCCCATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATCTGGG  
GGGACACATTGAGACCAATAACACTGTGTGAAGTGGCCAAGTCACCTAACCTTTCTAGC  
[A, C]

TTAGTTTTCTTTGGGTAAAATAAAGATCACAAATAACAACCACTTCACAGTTGCTGAGAT  
GATCAAATGAGACAAATGTGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTT  
CCAAAATGTGTTCTGTGAGACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGG  
TGTCATGGTAAAGTCAGTTTGAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCA  
TGCACGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTA

11953 ACATTGAGACCAATAACACTGTGTGAAGTGGCCAAGTCACCTAACCTTTCTAGCATTAG  
TTTTCTTTGGGTAAAATAAAGATCACAAATAACAACCACTTCACAGTTGCTGAGATGATC  
AAATGAGACAAATGTGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTCCCAA  
AATGTGTTCTGTGAGACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGGTGT  
ATGGTAAAGTCAGTTTGAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCATGCA  
[C, T]

GTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTAAATCA  
ATATAACATTTATTATCTCATAAGTTCTGTGGATCAATAATTGAGGGATAGTTTAAATTG  
GGTGGTCTGACTAGGAGTCTGTGATTGTTGTTGTCAGATGTTGTCGGGCTGCTGTGAT  
CTGATGGCTTGACTGGGGCAGGAGGATCTGTTTCCAAGATGGTGTGCTCATGTGGCTTGC  
AAATTGCTGCTGGTTGTTGGGGAGAGGGCTCATTTCTGCCAATGTGGGCCTGTCCATGG

11967 ACAGTGTGTGAAGTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTTGGGTAA  
AAATAAAGATCACAAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGACAAATG  
TGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTCCCAAATGTGTTCTGTGA  
GACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGGTGTGATGGTAAAGTCAGT  
TTGCAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCATGCACGTTAGCATGTTAC  
[T, C]

GTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTAAATCAATATAAACATTTAT  
TATCTCATAAGTTCTGTGGATCAATAATTGAGGGATAGTTTAAATTGGGTGGTCTGACTAG  
GAGTCTGTGATTGATTGTTGTCAGATGTTGTCGGGCTGCTGTGATGCTGCTGACT  
GGGGCAGGAGGATCTGTTTCCAAGATGGTGTGCTCATGTGGCTTGCAAATTGCTGCTGGT  
TGTTGGGGAGAGGGCTCATTTCTGCCAATGTGGGCCTGTCCATGGGATGCTTATGTGTA

12172 TCTGAGAAGAAAAGTGGTGTGATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCA  
TTCTAGAGAGTCATCATGCAGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCC  
CAACATTTAGTGGCTTAAATCAATATAAACATTTATTATCTCATAAGTTCTGTGGATCAA  
TAATTGAGGGATAGTTTAAATTGGGTGGTCTGACTAGGAGTCTGTGATTGTTGGTTCAG  
ATGTTGTCGGGCTGCTGTGATCTGATGGCTTGACTGGGGCAGGAGGATCTGTTTCCAAG  
[A, C]

TGGTGTGCTCATGTGGCTTGCAAATTGCTGCTGGTTGTTGGGGAGAGGGCTCATTTCTGT  
CCAATGTGGGCTGTCCATGGGATGCTTATGTGTAATCATATGTGACATGGTGGCTGGCT  
TCCCAAGAACAAGTGATTCAAGAGAGAACAAGGTGGAATTGGCAACACTTTTATGACT

FIGURE 3, page 55 of 107

TAACCTTCAAAAATCACATATTGTTACCACCACCACGTTCTTTTCATTAGACGCCAGTCAC  
TAAAGTTAGTCCACATCTGGGGAGTGGTGGGGGTGATCACATTACGTTGGAAGGGAGAC

- 12188 GTGTCATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCATTCCCTAGAGAGTCATC  
ATGCACGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTT  
AAATCAATATAAACATTTATTATCTCATAAGTTCTGTGGATCAATAATCAGGGATAGTT  
TAATTGGGTGGTCTGACTAGGAGTCTGTGTCATTGATTGTGGTCAGATGTTGTCCGGGCTGC  
TGTCATCTGATGGCTTACTGGGCGAGGAGATCTGTTTCCAAGATGGTGTGCTCATGTG  
[G, A]  
CTTGCAAATTGCTGCTGGTTGTTGGGGAGAGGGCTCATTTCTGCCAATGTGGGCCTGTC  
CATGGGATGCTTATGTGTACTCATATGTGACATGGTGGCTGGCTTCCCCAAGAACAAGTG  
ATTCAAGAGAGAACAAGGTGGAATTGGCAACACTTTTTATGACTTAACTTCAAAAATCAC  
ATATTGTTACCACCACCACGTTCTTTTCATTAGACGCCAGTCACTAAAGTTAGTCCACAT  
CTGGGGAGTGGTGGGGGTGATCACATTACGTTGGAAGGGAGACATGTCAAAGAATTTGA
- 13472 GTCCCTTCTTTTACAGATTCACTGACTGACAACTTAACTTTCTTGGGTAAAGCCAGAAAA  
AACAGGATGGCCTCCAGGCCGAGCAGTAGAAATGCTGGGGAATGGGGTGTCTGGTGTGTG  
TCTGGTGTGTTCCCTGCAGTGCCTGCAGGCCATGTGTCTGTATGGTGAACACGCAAGT  
CGGCATCCAGCCAGGATGGCAGGGACCGTGTGCTGGGGGTGACGGCAAACACACAGTGA  
GAAGCTGCTGATGGAGGGAGGACCGTTAGCACTCCTTGTCTATTTTGTAGTAAACATTTT  
[-, T]  
TTACAATCTTGTGTGCTTTTTCTGTACAGTCTTGAGAAAATGATTTCCAGGAAGCAGGATG  
CATCCAATGACTTAGAGGTTCCCATGTTTCAAACATTACATGCCTGGCTTATTCCTGAG  
GCAGTTTTGTATTCTGAAGGAAGTTTGGAGCTTCTGTGTTCTGGGCAGAGGCGAGTGAA  
TATGGTTTCTTTTGTAGTACACCGTGGACTTGAGAATGATCAGGAGCTGGACATTGTTGA  
ATATGTCACCTTACTGCACAAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTT
- 13781 TTGTTGCTTTTTCTGTACAGTCTTGAGAAAATGATTTCCAGGAAGCAGGATGCATCCAAT  
GACTTAGAGGTTCCCATGTTTCAAACATTACATGCCTGGCTTATTCCTGAGGCAGTTTTT  
GTATTCTGAAGGAAGTTTGGAGCTTCTGTGTTCTGGGCAGAGGCGAGTGAATATGGTTT  
CTTTTGAGTAGCACCGTGGACTTGAGAATGATCAGGAGCTGGACATTGTTGAATATGTCA  
CTTACTGCACAAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTTGAATGGAG  
[A, C]  
TGCCTGGGGCCCCAGTCACATTACAGGAGCCAGCACTGATGGCATCTGTAACCATAGTAAC  
CAAGAGTGGAAAAAGTCTCAGGATGCCAAGACGCCACTGTGCCCCCTTCTGGTTCTGTT  
GTTTTCCCTCTATTCTTTCATCCAGAAATTCCCCATCCCTGCCCCCAACCACCTGAC  
AAGGGACTGACTTTCAGGTTGGTTTCTACACTGGTGATTTTAACTTCTACTAACTCAAC  
ACTTCCTGTAGCCCCCTTTTCAGTTCTGAGATCCACAAGGATTCAATTATGATCCAGACTA
- 14031 AAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTTGAATGGAGATGCCTGGGG  
CCCCAGTCACATTACAGGAGCCAGCACTGATGGCATCTGTAACCATAGTAACCAAGAGTGG  
AAAAAGTCTCAGGATGCCAAGACGCCACTGTGCCCCCTTCTGGTTCTGTTGTTTTCCCC  
TCTATTCTTTCATCCAGAAATTCCCCATCCCTGCCCCCAACCACCTGACAAGGGACTG  
ACTTTTCAGGTGGTTTTCTACACTGGTGATTTTAACTTCTACTAACTCAACACTTCTGT  
[A, G]  
GCCCCTTTTTCACTTCTGAGATCCACAAGGATTCAATTATGATCCAGACTAAGCCTCATGC  
ACCTAATTTCTTCCGCTTTTCCATTTTACTGTGAAAATTGGTCCCTAAGTCTGTAGTAT  
ACATACTCTAGACTTATTTACAGCTGGGCATAACAACGGTGGCTCATGGCACTCAAAGTT  
TCCAGTAACACTCCTGCACTCACAGTCTGGTATAGATCATGAGATTTTTTTAGATGTGTT  
TTAAATGAACAGAGAAAGCAATGAGGCACAGGAAAGAGAGCCGTGGTCTCTTGTGTTGGA
- 14110 CCAGCACTGATGGCATCTGTAACCATAGTAACCAAGAGTGGAAAAAGTCTCAGGATGCCA  
AGACGCCACTGTGCCCCCTTCTGGTTCTGTGTTTTCCCTCTATTCTTTCATCCAGAA  
ATTCCCCCATCCCTGCCCCCAACCACCTGACAAGGGACTGACTTTCAGGGTGGTTTCTA  
CACTGGTGATTTTAACTTCTACTAACTCAACACTTCTGTAGCCCCCTTTTTCAGTTCTG  
AGATCCACAAGGATTCAATTATGATCCAGACTAAGCCTCATGCACCTAATTTCTTCCGCTT  
[T, C]  
TCCATTTTTTACTGTGAAAATTGGTCTAAGTCTGTAGTATACATACTCTAGACTTATTT  
ACAGCTGGGCATAACAACGGTGGCTCATGGCACTCAAAGTTTCCAGTAACACTCCTGCAC  
TCACAGTCTGGTATAGATCATGAGATTTTTTTAGATGTGTTTTAAATGAACAGAGAAAGG  
CAATGAGGCACAGGAAAGAGACCGTGGTCTCTTGTGTTGGAGATGTGGGTTTTGCTACTG  
GTTGGAAGTGAGGTGTGGCATGGCGCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGT

14248 CCAACCACCCTGACAAGGGACTGACTTTTCAGGGTGGTTTCTACACTGGTGATTTTAACTT  
CCTACTAACTCAACACTTCCTGTAGCCCCCTTTTCAGTTCCTGAGATCCACAAGGATTCAT  
TATGATCCAGACTAAGCCTCATGCACCTAATTTCTCCGCTTTTCCATTTTACTGTGAA  
AATTGGTCCTAAGTCTGTAGTATACATACTCTAGACTTATTACAGCTGGGCATAACAA  
CGGTGGCTCATGGCACTCAAAGTTTCCAGTAACACTCCTGCACTCACAGTCTGGTATAGA  
[A, G, T]  
CATGAGATTTTTTTAGATGTGTTTTAAATGAACAGAGAAAGGCAATGAGGCACAGGAAAG  
AGAGCCGTGGTCTCTTGTGGAGATGTGGGTTTGCTACTGGTTGGAAAGTGAGGTGTG  
GCATGGCGCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGTCATGTAGGGCATAGTAGG  
TCTTACTTACTAAGGAACCTTTTTTTCTGAGAATAACAGGAATGTCTTGATTGATTTGA  
AGTGGGAGGATGACACAATCAGATTTTTTAAAGATTATTTAAATCGCTAATAAATCAAAT

14676 GCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGTCATGTAGGGCATAGTAGGTCTTACT  
TACTAAGGAACTCTTTTTCTGAGAATAACAGGAATGTCTTGATTGATTTGAAGTGGGA  
GGATGACACAATCAGATTTTTTAAAGATTATTTAAATCGCTAATAAATCAAATGATGGGT  
TCAGCGAATGTTTGCAGAGGATACTTACTGTGTGACAGGCATAGTGTGCTGGCCTTACCTGG  
GGTATCTGTGTATTCTTGTAGGAATCCTACATAAAAGCTGTTAAATATTTTAAACAGAAA  
[T, C, A]  
AAGCTTTTCTTGACATCTTTGAATTATGACAACCAATTCCAACTTCTGGTTGCAAATGG  
GAGGTGTATCTTAAAGCAATGGCGATTGCATTTTCAATTTCTGTTTCAATAAATGATATT  
TTCCTGGCTTTGTTACATGACCCCTGATTCTGTGATAAATTTGCATATCTAGAGTCGATG  
AATCAATACATGCAAACTGTGGTGGCTCGCTCATATTCTGTTATACTTCAGACGCCTTTTGA  
TTGGAAGCATGTGGCTCTCAGTTCAGCATAATGCTCCTGATAAAATTGCCCCCTCCATAC

14981 TTTTCTTGACATCTTTGAATTATGACAACCAATTCCAACTTCTGGTTGCAAATGGGAGG  
TGTATCTTAAAGCAATGGCGATTGCATTTTCAATTTCTGTTTCAATAAATGATATTTTCC  
CTGGCTTTGTTACATGACCCCTGATTCTGTGATAAATTTGCATATCTAGAGTCGATGAATC  
AATACATGCAAACTGTGGTGGCTCGCTCATATTCTGTTATACTTCAGACGCCTTTTGG  
AAGCATGTGGCTCTCAGTTCAGCATAATGCTCCTGATAAAATTGCCCCCTCCATACCCGC  
[C, T]  
GTCACCTTTGTTTCTGGTGTGTCCAGAGGTATTGTAACATTGGGGTATTTCTCCTTTGACT  
CTAATGGGACCCCTGCTAGTTGTGTCTTGTGGCCTCAGCTTGGAAAGGCCTCCCAAAAG  
CCTGAATTAATGAAAGCTTCTGATGTGCCGATCCCTTTCTCTGGCAGGGTGAGAACGCAG  
TTTCTATAGGAGCGTGAATGCCTGCTGCTCAGGCAATAATCTCTGCATTGAGCCTCAGTA  
CTAAAGACAGGCAGAGCAGACAGCCACAGGGGGTGGGATTTGAGGAGCCCTATAAAGTCC

16365 CAAAAAGAGGACAAAGCATATCTATGAACCCGTAATGCTAACCTTCATTATTCAACAGTG  
ATGCTTATGGCAATGCCAACGGGTGTTGGGGCCTTTTATTAATTTTAAATTTTAGTTTTT  
TATGTTTTTGGAGACAAGATCTTGATTTGTCGCCCCGAGCTGGAGTGCAGCGGTGCAATCAC  
AGCTCACTGCAGCCTCGATCTCCTGGGCTCAATCAATCCTCCCACCTCAGCCTCCTGAGT  
AGCTGGGACTATAGGCATGTGCCCCCAGACTTGGCAAATTTATGCATTTTTTGTAGAGAC  
[A, G]  
GGATTTTGCCATGTTGCCCAGGCTGGTCTCGAACTCCTGAGCTCAAGCAATCCGCCTACC  
TTGGCTTCCCAAAGTGCTGGAATTACTGGTGTGAGCCACCGTGCCCTGCCTGCTTGAAGC  
TTTTTGCTATTCTCCCTCCTATGGGAAAAAGAATCGAGAAAGAGCAGTAGGCTCTACTAG  
AGTCTGGAGCATATCGGTTCTGAGATTTAGATTAAATTTCTCTATGTCTGCAGCAAGTAC  
AAATGTGAGTGTATATTAGCCTCTTGAAGAAGACATCTATCCATTTCTTCAGTGAATAT

16827 GAGCAGTAGGCTCTACTAGAGTCTGGAGCATATCGGTTCTGAGATTTAGATTAAATTTCT  
CTATGTCTGCAGCAAGTACAAATGTGAGTGTATATTAGCCTCTTGAAGAAGACATCTAT  
CCATTTCTTCAGTGAATATTGCCCCGAGTCTTCTTCGTGACAGGCACTGTTGTAGGCCC  
TGGAGGTACAGCAATAAACAAGACGAAGTCTCTGCCCTCCTGAAACTAACCCTTTAGCCA  
AGCCTTAGCATCTCTCACACTCAGGTCAACTTCTGCATTTTAGAAATCTGTTTCAGGCAC  
[G, A]  
CATTTGACAAGTAAAGAGGTTCCAAAAATACATTAATAAGGATGAAAAAGAGGCCATTCT  
GATATTCCATTGCTTGGCAAAATGCTTAATATGGGAATTTAATATGGAATGGGTGCTGA  
TGCTGTCAAAGTGGTGACATTCTGTTAGAAAATTCAGTGATTTCAAAGAAGGCCTCAGA  
GCTGCCTAGTTTGAATTAGATATTTTGAAGAATCTGTGTTAATTAGGACTCTGTGGCTT  
GTGCATGTATACTGGGACGAGACTGGAGTTTGTGTCTCTCCCATGATGATGGCATGTAAA

17599 TGTCTTTTGAAGTAGGAGGAAATTAGGACTTTTGTCTGTTATATGCCTTGACAGTCTCTGG  
CCTTCTCTGGGCTGCTGGGGCAGAATGAGGCCAACAGAGAACCACGGATGCCAGTCTGGG  
TCACAAGGGCTTAAGGAAGCAGCAGATGGTTGGACTGACTGGGGTGTCCATTAAGAATCC

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AGGGGTAGTGAGAGTCTTACCTGGAGTTTGAGGCCGCACTTCCATTGCCAGGACTCTCAG  
CTGAGTGGCTGGAAGAGACCTGTAGGAGCCATCCTTCCAGTATCTATCAGAGGTTTCTGC  
[A, T]  
CTGTTTTAAGCTCGTCTTAGTGATCGAGGGAACCTTGACTGGGGTGCTGATGATTATTA  
ACAGTGGCCATACTCCCACGGCTGCAGGTGGAGATGAAGTGTGATGAGAAGATGAGCA  
AGAGCTCAGGTGTGCCCCACCAGCTCTGCCACTCCAAGCTGCCGAACCTTAGGCACTAAC  
TTACCTCTCTGTGTCTGCTTCCCAACTTGAGAACCGGAAATGATAAAAGTACCTGCTCCC  
TAGGGAGTAGGTATGGTTAAATGAGACCTCTTAAATGAGACCATGCACACGAAGAGCAGA

18093 TCTGCTTCCCAACTTGAGAACCGGAAATGATAAAAGTACCTGCTCCCTAGGGAGTAGGTA  
TGGTTAAATGAGACCTCTTAAATGAGACCATGCACACGAAGAGCAGAGCACAGTGCCTGG  
CACACAGGAGGCACCTAATAAACATCAATGATGCTGCTGCTGGTAACACCCATTTGCTGA  
GGGTCTTCAGTGGCTCAGGCACAGTACTCAGTGCTTAACATATAATATGTAATTTATTCT  
TCACAGTAGCCTGAGTCACTTGCTTGTCTTCTGTTAATATCCTAATGTTTAGCTCACC  
[A, G]  
ACTTAGATGCTCATGACTTCCAAAGGATCTTCATGTAACAAGGACTCCATATCTATTTTT  
AAAAAATAAGAGCTTTATTAAGATATAATTTACATACCATAAAAATTACCTATTTAAAATG  
TACAATTCAGTGGTTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATT  
GTAGAAAATTTTCATGACTCCAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATT  
TTATCTCTCCAGTCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCTAT

18226 CCTAATAAACATCAATGATGCTGCTGCTGGTAACACCCATTTGCTGAGGGTCTTCAGTGG  
CTCAGGCACAGTACTCAGTGCTTAACATATAATATGTAATTTATTCTTCACAGTAGCCTG  
AGTCACTTGCTTGTCTTCTGCTTAAATATCCTAATGTTTAGCTCACCAACTTAGATGCTC  
ATGACTTCCAAAGGATCTTCATGTAACAAGGACTCCATATCTATTTTTAAAAAATAAGAG  
CTTTATTAAGATATAATTTACATACCATAAAAATTACCTATTTAAAATGTACAATTCAGTG  
[G, C]  
TTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATTGTAGAAAATTTTC  
ATGACTCCAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATTTATCTCTCCAG  
TCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCTATTTTGGGCATTTCA  
TGTAATGGCATCATACAACAGGTAGATATTTGTGTGTGTGTGTGTGTGTGTGTGTGTGT  
GTGTGTGATCAGCTTCTTTCACGTAACATAATGCTTTCAGGGTTCACCTCATGTGGCATC

18467 TTTATTAAGATATAATTTACATACCATAAAAATTACCTATTTAAAATGTACAATTCAGTGG  
TTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATTGTAGAAAATTTTC  
ATGACTCCAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATTTATCTCTCCAG  
TCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCTATTTTGGGCATTTCA  
TGTAATGGCATCATACAACAGGTAGATATTTGTGTGTGTGTGTGTGTGTGTGTGTGTGT  
[-, T, G]  
TGTGTGATCAGCTTCTTTACGTAACATAATGCTTTCAGGGTTCACCTCATGTGGCATCC  
ATACCTATTTTGAATGAAGAATGAAGACAGTCATCTGAGACAGTTGTATTAGTCCATTTG  
GAAGATGAGGAACTGAGGCTGAGAGTGTGTATGTAATTTGCTCATGGCCACCCATCTTG  
AAAGCGCTTGAGCTGGGATTTGTGCTCAGGTCCATCTGGCTCCAAGGCAAGACCTTGGC  
CTTCTCATCCACTCACTGGTCTCTGGTTGGACCTCTGCATCATGCTGAACACCATTCTA

18511 ATGTACAATTCAGTGGTTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTA  
ATTGTAGAAAATTTTCATGACTCCAAAAGAACTCCATATCCATTAGCAGTCACTCCCC  
ATTTTATCTCTCCAGTCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCC  
TATTTTGGGCATTTTCATGTAATGGCATCATACAACAGGTAGATATTTGTGTGTGTGTGT  
GTGTGTGTGTGTGTGTGTGTGTGTGATCAGCTTCTTTCACGTAACATAATGCTTTCAGGGT  
[-, A, T]  
CACTCATGTGGCATCCATACCTATTTTGAATGAAGAATGAAGACAGTCATCTGAGACAGT  
TGTATTAGTCCATTTGGAAGATGAGGAACTGAGGCTGAGAGTGTGTATGTAATTTGCTC  
ATGGCCACCCATCTTGAAAGCGCTTGAGCTGGGATTTGTGCTCAGGTCCATCTTGGCTCC  
AAGGCAAGACCTTGGCCTTCTCATCCACTCACTGGTCTCTGGTTGGACCTCTGCATCATG  
CTGAACACCATTCTATAGAGATGGGTGTGTCCCCTGGGTGTGGACATCCTGAGGAATT

19107 GAATTGCTGTGGTTGCAAGAACTCTGATATTTTCCATCTACCTTGAGGGGGATATGGTTT  
CATGTCTGTATACTCACATAGTGTGACAGTCTAATTTCTTTGTCCATTTCTTAAGGGT  
TATGATATGAACCTGGAAAGTTACAGAAATGAAAGTGATAGGAGAGATATACTTTCTGGG  
TTGGAAACCCAGCAACCAGTCACTCAATATGATGGAGGAAATGTCATCCTTCTTGTGTGTG  
TCTTCAATAATAGATTGTAATGAAACACTATGGTGTCTTAGTTGGCTCCCCTCCTGCCCC  
[G, A]

TGCCCCCTCCCCAGCCCCAGTGTCTTTCTGGAGACATGAGATGGTGTATCCCTTCCTCA  
GTTGCTGTGATAGCAGTGGGGATGATGGGGACAGGTATTCATGGAAGGAAAAGGCATGGT  
ACCAGCAGGCTCTTGGGCAGGGATGTGTGTCTTCACTTGATCATCAGGGAATGAGCTATC  
ATGATGACAGAGCACATCCTATGAAGTACAAATCTTCCCCACATTTCCCCAAATTACT  
TTTGTCTGCTCTGTCTCTCACATGCTATTCTAGGAAAAGGTCCCATTTTATCATTA

19223 GGGTTATGATATGAACCTTGGAAGTTACAGAAATGAAAGTGATAGGAGAGATATACTTTT  
TGGGTTGGAAACCCAGCAACCAGTCACTCAATATGATGGAGGAAATGTCATCCTTCTTGT  
GTTGTCTTCAATAATAGATTGTAATGAAACACTATGGTGTCTTAGTTGGCTCCCCCTCTG  
CCCCGTGCCCCCTCCCCAGCCCCAGTGTCTTTCTGGAGACATGAGATGGTGTATCCCTT  
CCTCAGTTGCTGTGATAGCAGTGGGGATGATGGGGACAGGTATTCATGGAAGGAAAAGGC  
[A, G]

TGGTACCAGCAGGCTCTTGGGCAGGGATGTGTGTCTTCACTTGATCATCAGGGAATGAGC  
TATCATGATGACAGAGCACATCCTATGAAGTACAAATCTTCCCCACATTTCCCCAAAT  
TACTTTTGTCTGCTGTCTTCTCTCACATGCTATTCTAGGAAAAGGTCCCATTTTATCA  
TAAAAATGCAAATGAGATTTCCATCTTGCTTCTACCAAGAAGGAGGAAAATAACCTATA  
TAAACACCATGAAACCTTACTTTGACTTAAACTAGTGGAAATTGGCCCCGAATCAGAT

20102 TGGAAGGCAGGAAGTGTGGGGAATTAGTGGACCCAGGAGGAGCCCTCAACCAATAACT  
GATGGAAGATGGTGCCTAAACACCCCAATTCCTCAGCCTTGGGTAGGGTAACCTCAGGAA  
TATGGTTTACATGGGGTCCCAGTTTCTCTGTAGGAAAAATTCCTAGTGGCGACAGCAGT  
AGCTAGTTAGAACTTACCTTTTATTTGGTTTTCTTGGCTGCCTTCCCAGCCCTTTCTCT  
TTTCTCTAATTCCCTACTGGCGATTTCTTCACTTCCCAAACAAACCACTTGTGCTCAAAT  
[T, C]

GTAATTGTAGGATCAGCTTCTGGGGAAACCCAAATGAAGACATATGGTAAAGCTTCCCTC  
TTTTCTTGCTTTCTGCCTTTTGCCCCAATCAGTTAGCTTTGATGGTGGGAGTGAGGGGA  
TGCTCAACCTCTCAGGCAGGCTAATGGCTCTCAGGAGACACAATCCACAGCTGATTGGCA  
GTTTTCTCCCCAAGATATCTTCAAGAACAAACCTGGTGTCTGGTGAAGTATCCATGCAGCA  
TGAAAAGAGAGGGTGAAGCTTGATGAGGCATGTTCCAGTCTCATCAAATATTTTGTTC

21946 TTTTTTGTGGAGACGGCCTCCCTATGTTGCCAGGCTGGTCTCCAACTCCTGTTTTCAAG  
CCATCCCCCTTCTCACTCTCCCAAAGTACAATTTAGTATATTTATTAACGTGTGTTCCA  
GGCTTTTTGATTGCTATTGAGATGCTAATGAGATGGTCCCTGTCTATTAAAGAGCGTCCAT  
TCTGGTGGCACAAGGAACCTCAAATTTATGACACAAGACAGAATACCTACTCCAGAAGAGAG  
TTCTGTGAAAGCGTGAAGGAGGACTTGAGTGTGCGATTGAGGAAGGACTTCACATTGGA  
[G, T]

GGAGTTTTTTTAGATAGGTCTTGAGAAACATTTTACATTTTGAACACCTCATACATCATT  
GATAAAAAAAGAAGCAATTGGTTCGAAACAACTTCATTTCCCCAGATCAAGTCTTCTAGG  
TTACCTGCATCTGCACCCACCACTCCACCTTGATTCTCTCTAGATGAAGGGCGTCTTT  
TCCTACCTAAGGCCGTCCCTTCTGCTTATGCTGGGACTCCTTTGCTCTTTGGGGCATCC  
TCTCTTCTCTGGGGAATTGATCTCTCCCTCTCTACTTGAATATTCCTACTAGTGATAC

22240 ATTGGAGGGAGTTTTTTTAGATAGGTCTTGAGAAACATTTTACATTTTGAACACCTCATA  
CATCATTGATAAAAAAAGAAGCAATTGGTTCGAAACAACTTCATTTCCCCAGATCAAGTC  
TTCTAGGTTACCTGCATCTGCACCCACCACTCCACCTTGATTCTCTCTAGATGAAGGG  
CGTCTTTTCTACCTAAGGCCGTCCCTTCTGCTTATGCTGGGACTCCTTTGCTCTTTGG  
GGCATCCTCTCTCTCTGGGGAATTGATCTCTCCCTCTCTACTTGAATATTCCTACTAG

[T, C]  
GTATACATGGGCTTCCGTGTCATCCCCCTTGATCCCGCATTGCCGCCAGCCACCCCTCAT  
TCCTTTAGGCCCTTTCACAGCAAAATGCTGGAAAGGGTGGTCTGAAGTCACCATCACTAC  
TTCCCTCCCTCACAATCTTTCCAAGCCACCACCACTTTATGGGGGCTGCTCCTTTGGAGG  
CCACTTATGGACATTGCATCACCTTTCTGTCCTTTTATCTTAAGTACCAGTTAGGATGCT  
TTCAGCTGCCCTGTTGCAGAATGTCTGATACAAGTGACTTACACAATACGGACATTGACT

22679 TTCCAAGCCACCACCACTTTATGGGGGCTGCTCCTTTGGAGGCCACTTATGGACATTGCA  
TCACCTTTCTGTCTTTTATCTTAAGTACCAGTTAGGATGCTTTCAGCTGCCTGTTGCAG  
AATGTCTCTGATACAAGTGACTTACACAATACGGACATTGACTGTTAAGAGAGTTACGTTT  
TCACTGAACAAGGATGTTCCAGGCTTGGCTTGGGTGTTTCATAACACCTTCAAGGACCCA  
GACTTCAGTTTCTGCCCCTGCCTCTCTTGATCACATCAGCAGATATTATGTCGTCTAAAA  
[A, G]

CAGGGAAGGGAGTGAAGTAGCCTCTGTGTTTTTCTTTTTATCATGGAGGATGTTTTTTTT  
GCCCTGCAAGCCCCATGCACATTTCTTAATATCACCCCTAAACTCATCCCTGGCAAAG  
GGGGATGGTATTATCCTTATTGGCTTGGACCAATTAAGATTATCCCTGAGTCTGTGAA

FIGURE 3, page 59 of 107

TGGGACGCATCTTCTTTGAAATGTTGTCAATTTAACCAAAATTGGATCTGTTAAAGGAAGG  
GGGAGCGCCTAAGGTGAAAGTGCCAGGCAGTGTCTGCCACATTTCCCTGACCCTTCCTA

23178 AAATGTTGTCAATTTAACCAAAATTGGATCTGTTAAAGGAAGGGGAGCGCCTAAGGTGAA  
AGTGCCAGGCAGTGTCTGCCACATTTCCCTGACCCTTCCTAGCAATTTTGACAGCCAGC  
CACCCCATCCTTCTTGAAGCACTTCATTTCCATCACATGCTTTGTGACATCATTTCTCT  
GGGTTTTATTTATTTATTTATTTTATTTTATTTATTTGAGACAAAATCTCTCTCTGTTGCC  
AGGCTGGAGTGCACTGGCACGATCTCAATTCAGTGAACCTCTGCCTCCCGGTTCAAGT  
[T, C, G]  
ATTTTCTGCCTCAGCTCCCAAGTAGCTGGGATAACAGGCATGTGCCACCACACCTAGC  
TAATTTTTGTATTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGACTGGTCTTGAAC  
TCCTGACCTCAGGTGATCCACCCGCCTCGGCCCTCCCAAAGTGCTGGGATTACAGTCATAA  
GCCACCGCCTGGCCGCTCTGGGTTTCTTTTAACTTTCTGGCCACTCCTGTTCTCTG  
TTGACTCCTTTCTCATTGCTCTACCTCTAATTGGTGAATGCCCAAATAGTTAGACCTGA

23370 TTTATTTATTTTTTATTTATTTGAGACAAAATCTCTCTCTGTTGCCAGGCTGGAGTGC  
AGTGGCACGATCTCAATTCAGTGAACCTCTGCCTCCCGGTTCAAGTGATTTTCCTGCC  
TCAGCCTCCCAAGTAGCTGGGATAACAGGCATGTGCCACCACACCTAGCTAATTTTTGTA  
TTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGACTGGTCTTGAACCTCCTGACCTCA  
GGTGATCCACCCGCCTCGGCCCTCCCAAAGTGCTGGGATTACAGTCATAAGCCACCGCGCC  
[T, G]  
GGCCGCTCTGGGTTTTCTTTTAACTTTCTGGCCACTCCTGTTTCTGTTGACTCCTTTCT  
TCATTGCTCTACCTCTAATTGGTGAATGCCCAAATAGTTAGACCTGAGGTCTTCTTGT  
CAGGATCTGTAGGTTCTCTGAGTGATCTCAGCAGTCCCTTTGTATCATCTATATGCCGA  
GTATATCCTAAACTTGCTTCTCTCAAGAGTTTGTCTCATCTCATTTGAATGAGTTTCCCATCT  
CATTGATGGGCACCGCCATCTATCTGTATAGTTGCTTAAAGTACGGGCATGTTGCATGAG

23583 CAGACTGGTCTTGAACCTCCTGACCTCAGGTGATCCACCCGCCTCGGCCCTCCCAAAGTGCT  
GGGATTACAGTCATAAGCCACCGCGCTGGCCGCTCTGGGTTTTCTTTAACTTTCTGG  
CCACTCCTGTTTCTGTTGACTCCTTTCTCATTGCTCTACCTCTAATTGGTGAATGCCC  
AAATAGTTAGACCTGAGGTCTTCTTGTGAGGATCTGTAGGTTCTCCTGAGTGATCTCAG  
CAGTCCCTTTGTATCATCTATATGCCGAGTATATCCTAAACTTGCTTCTCTCAAGAGTTT  
[A, G]  
TCATCTCATTTGAATGAGTTTCCCATCTCATTGATGGGCACCGCCATCTATCTGTATAGTT  
GCTTAAAGTACGGGCATGTTGCATGAGTCTCTGTTTCCACCCCTGCCATTTTGTCTC  
CACTCACCAGCAAGTCTGCCTGATACGATATCTAGAACACATCCAGAATCTGTTTGT  
CTCTCCATTTCTGCTCCTGCCACCCTCATTCCACGCATCTTCTGTGTGGAGAGCTGACA  
GCCTTTTTATCGGCCTCCTTTCTTCTACCTTGCTCCCAATAATTGATCCTCCGTGGAAC

24159 CCCAATAATTGATCCTCCGTGGAACAGCCACAATGATCTTTTAAAAATATGAATCTGATT  
TCTCTTGACCCGAGCTTAAAAATCTCTATCGGTTCTCTTTCCACTCGGCATAAAATCT  
GCTTTCTGGTGCTGGCCTGCAGCACCTGAGTGCTGGCTGTGCTGACCTCCTTTCCAAGG  
CTGGTCTTGAGCCGTCTTCTCTAACCCTATGCTGCACCTCTTTCTGCTTCTCTTGAATAA  
ACAAGCTCCTCCTGATCTGAGGGCCTTTACGGGACCTCTTTTTTTTTTTTTTCTCCTAG  
[G, A]  
ATTATCTTCTGCCCAATTTTCATAGGACTGGCTTCTCCTCGCCTCTGAAATCTCAGTCCA  
AATGTCTATGCTCCAAGAACTCTTCTCTAACCAGCCACTCCTGCTGGGCACCCCTGTT  
GTAGCATACTGTTAGGAGTCTCTGCATCATGCCTCTAACTCTTTGAAAAAAGTTCTATT  
TGTTAGTTTAAATAAACTAAAAATTTATAAACCAAAATTTCAAATTTTAAAAAT  
TAATAAACTAAAAACAGTACAATGATATCTCTGTGAAGTCAAGGGAGGAGAGAGTTTAA

24307 GAGTGCTGGCTGTGCTGACCTCCTTTCCAAGGCTGGTCTTGAGCCGTCTTCTCTAACCT  
ATGCTGCACCTCTTTCTGCTTTCCTTGAATAAAACAAGCTCCTCCTGATCTGAGGGCCTT  
TACGGGACCTCTTTTTTTTTTTTTTCTCCTAGGATTATCTTCTGCCCAATTTTCATAGGA  
CTGGCTTCTCCTCGCCTCTGAAATCTCAGTCCAAATGTCATGTCTCCAAGAATCTTCT  
CTAACCAGCCACTCCTGCTGGGCACCTCTGTTGTAGCATACTGTTAGGAGTCTCTGCAT  
[C, T]  
ATGCCTCTAACTCTTTGAAAAAAGTTCTATTTGTTAGTTTAAATAAACTAAAACTAAAA  
ATTTATAAACCAATTTCAAATTTTAAAAATTAATAAACTAAAAACAGTACAATGATAT  
CTCTGTGAAGTCAAGGGAGGAGAGAGTTTTAAGAAGGGGAACCTTAATTAGCAGCACTAAA  
GGCTCTACAACGACTCAAGATAATGATAATGATGATGATGATGATGGTGATAATGACAGT  
GATAACTAACATTTATTGTTACTATGAACCTGGAAGAGTGCCAGGCATTTTGCCTACATT

24493 TCTCCTCGCCTCTGAAATCTCAGTCCAAATGTCATGTCTCTCCAAGAATCTTTCTCTAACC  
 GCCCACTCCTGCTGGGCACCCCTCTGTTGTAGCATACTGTTAGGAGTCTCTGCATCATGCC  
 TCTAACTCTTTGAAAAAAGTTCTATTTGTTAGTTTAATAAACTAAAACAAAAAATTTA  
 TAAACCAAATTTCAAATTTTAAAAATTAATAAACTAAAACAGTACAATGATATCTCTG  
 TGAAGTCAAGGGAGGAGAGAGTTTAAAGAAGGGGAACCTTAATTAGCAGCACTAAAGGCTC  
 [T, C]  
 ACAACGACTCAAGATAATGATAATGATGATGATGATGGTGATAATGACAGTGATAAC  
 TAACATTTATTGTTACTATGAACCTGGAAGAGTGCCAGGCATTTGCGTACATTATCATA  
 TTTAATCTGACAGATTAAAGTCTGACAATGCCTCTACTGTCAAGGAATGTTATTCTC  
 ATTCTCAGAACACTGAGACTTAGGGAGGTGAGTCAAAGTGCCTGGCACATGGTAGCTTTC  
 GATTAATGTTTGCTATGTGAGTAAATAAATTTCCACAAGGTCCTGGAGCTGGTGAATGGT

24822 ATGATGATGATGGTGATAATGACAGTGATAACTAACATTTATTGTTACTATGAACCTGGA  
 AGAGTGCCAGGCATTTTGCGTACATTATCATATTTAATTCTGACAGATTAAAGTCCTGA  
 CAATGCCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGG  
 TCAGTCAAAGTGCCTGGCACATGGTAGCTTTCGATTAATGTTTGCTATGTGAGTAAATAA  
 ATTTCCACAAGGTCCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGAC  
 [C, T]  
 GAATCCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAAC  
 CCCTTAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTCTTATTATTATTTAA  
 AACATGATAAATAAATAAATTTTTCAGTCCAAAACCTTCTGAATTTTGGAATTCTGGACT  
 CCATTCAATTCATTTGAAGGCATAGGTGAGTCTTTAAAAGAAGCATTAGGAATGA  
 ATCCAGATTGAACAATTTCTTATTAAAATACCTTAAAGATGCATTCTTATGATGAGCCA

24946 GCCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAG  
 TCAAAGTGCTGGCACATGGTAGCTTTCGATTAATGTTTGCTATGTGAGTAAATAAATTT  
 CCACAAGGTCCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAA  
 TCCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCC  
 TTAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTATTATTTAAAC  
 [-, A]  
 TGATAAATAAATAAATTTTTCAGTCCAAAACCTTCTGAATTTTGGAATTCTGGACTCCAT  
 TCATTCAATTCATTTGAAGGCATAGGTGAGTCTTTAAAAGAAGCATTAGGAATGAATCC  
 AGATTGAACAATTTTCTTATTAAAATACCTTAAAGATGCATTCTTATGATGAGCCAGGTT  
 CATGTGCCAGGAAAGCTATTAAAACCTAGTCTTTGTGATGAGTGCAGTAAGAACCCCACT  
 TGAATTACGTAGTGAGCAGGTGCTTCTTAAACCAAGTTTCATGTTTGACAAGCTAGGAGA

24947 CCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAGT  
 CAAAGTGCTGGCACATGGTAGCTTTCGATTAATGTTTGCTATGTGAGTAAATAAATTTTC  
 CACAAGGTCCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAAT  
 CCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCCT  
 TAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTATTATTTAAACA  
 [-, A, T]  
 GATAAATAAATAAATTTTTCAGTCCAAAACCTTCTGAATTTTGGAATTCTGGACTCCATT  
 CATTCAATTCATTTGAAGGCATAGGTGAGTCTTTAAAAGAAGCATTAGGAATGAATCCA  
 GATTGAACAATTTTCTTATTAAAATACCTTAAAGATGCATTCTTATGATGAGCCAGGTT  
 ATTGTCCAGGAAAGCTATTAAAACCTAGTCTTTGTGATGAGTGCAGTAAGAACCCCACTT  
 GAATTACGTAGTGAGCAGGTGCTTCTTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAG

24959 AGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAGTCAAAGTGCCTGG  
 CACATGGTAGCTTTCGATTAATGTTTGCTATGTGAGTAAATAAATTTCCACAAGGTCCTG  
 GAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAATCCAAAGTCCGTA  
 TTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCCTTAACAGATTGAG  
 AAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTATTATTTAAAACATGATAAATAAAA  
 [T, C]  
 TAATTTTTCAGTCCAAAACCTTCTGAATTTTGGAATTCTGGACTCCATTCAATTCATTCA  
 TTGAAGGCATAGGTGAGTCTTTAAAAGAAGCATTAGGAATGAATCCAGATTGAACAATT  
 TTCTTATTAAAATACCTTAAAGATGCATTCTTATGATGAGCCAGGTTCAATGTCCAGGAA  
 AGCTATTAAAACCTAGTCTTTGTGATGAGTGCAGTAAGAACCCCACTTGAATTACGTAGT  
 GAGCAGGTGCTTCTTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAGAACCCAGTGTTA

25321 TGAAGGCATAGGTGAGTCTTTAAAAGAAGCATTAGGAATGAATCCAGATTGAACAATTT  
 TCTTATTAAAATACCTTAAAGATGCATTCTTATGATGAGCCAGGTTCAATGTCCAGGAAA  
 GCTATTAAAACCTAGTCTTTGTGATGAGTGCAGTAAGAACCCCACTTGAATTACGTAGTG

FIGURE 3, page 61 of 107

AGCAGGTGCTTCCTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAGAACCCAGTGTAA  
 ATGTTTTCTGGCATGTTGGCCTTTGGTTTCTCATATTATGGGACATATGTTTAGTGCTTG  
 [T, G]  
 GGTATATGCTTAGCCTACTCTTGTAGGATGACTGAGACCTCACACAACATCAAGGACATA  
 GTCTTTGCCTTTGCTGAGTTTCCAGAGTGAATTTGGAGTGATGAAACATACATGTGAATAAA  
 TGCAAAGTCACAAGTAAAGACAGTTAATGTGATTGATGAAGGACGTGTGGCACAAGATGG  
 ATAAGAATGAGAAGTAGAAGAAGTAGGTGGTTTGAACCTTCGTTACTCAGGGAAGGGAA  
 TGTATGTGGATTGGTGGAGAAGAGAGGGGAGGAAGATGGTTTAAAGCACTGGTAAGATGG

27280

TATGGATACCTTACATGCTAGGTTGAACATGGATTTATTTTACAGATGATCAGGAGCCA  
 TGGAAGGCTACACTAGCTGGGCGTACATAATTAAAGTCAGAGGGACAAATAACTGCAAGC  
 TAAATACTCTTAGGGAGAACTGCAGCAATCTGGGTGAGAAACAATGAATTTGTGAGTAG  
 TCACCATAGCAAAGTCTGGGCTAGGGGGGCACTGGAGGAGTGAAAAAGAAAGGTTTAA  
 TAGTCACTGAGAGGGCTGAGGACCCACTAGCCACTGGCATAGTGGAGTCAATCATTTCTC  
 [C, T]  
 GAAATTACGAGGAGGAGAGGTGGGGCATCTCTAAGGCGTGGAGCAGTGGAGGATGGTGAT  
 TGTATGGTAGGGGAAAGAAGATAATGATCGCAGTTCCAGTAGGTGATGGATGAGGAGGGG  
 AAGGCGTTTTACAGATTATTCAGTGGGAAAGAACAGAGGCAGTCCACACTGTAGTTAATT  
 CCTTTTATTTTGTCTTTAAGTATACTCAAGGATAAATAGCCATACAATTTCTGTTTGGC  
 TTTTCATGCTGGAGAGGTGCAGAGGTTGCACTGAACGTGGACGATATTAATTTTGACTTG

28062

GTGGCTGTGGATGCAATTCTGCCTTTACACAGAAATGACTCTCCTGGGCATACCTTTAGG  
 CAAAGAGCAGATGAACGCATAACGAGCAGCTTTGAGATTTGGTATTTCCACTGCAGAACG  
 AAGAGAAGGGTGGCCCACTGGAAATTTCCCTCAGAGAAACGTCTAAGTCTGCATCTCCAC  
 ATCCATTCATTTTCATGCATAGTTCTTTCATCTGTTGTTTTTAAATTTATCTATTTTATA  
 TAATGTCTATCTCTGTAGTACCTGGGATGAAATGCGCCAATCCTGACTGCAATGAATAGG  
 [G, A]  
 CAAAGCAATTCTTGGGAGCTGCTCTGGGCAGGAAGTGAGGCTGAATTCTTTTAAAGGAA  
 AATTTTTTGGGGATCGTGACTCACTGGCCTTCATCCCCATCATCACTGGGATTGGTTAAG  
 TGCCAGGAAACAGCTGGAAGTCGACAGACAATTTAGGGTACAAATGAAAGGAGAAGTTAC  
 TGTTAAAGGGATCTGTATTCTCTGTATCAAACACCAACGCTGTCTCTTAGCTAATAG  
 GAACCAAAACTGTGCCCTGAGAATGCTGCCAGATGTTTCTCAATAGGCACGTTACGTTTT

29033

ATGTTTTCTCAAGAGAAATGTTCTATTGTACTACATTAATTCCTTAGATGCATTTTGAAT  
 TATTTACCCTTCTGAAATCAGAATGTGTCTTACTAGCAATATGTCATAATTTAATTGGCA  
 ATTTAAATTTTCAAGAGGCACATAAGATAATGATGTGTTTTGTAATTGACAATGTCTTGA  
 TTTGATAGAAGATATTTGTACAATACTATATTGGTACCATGCTTTGGCCGATGTAATGGT  
 CCTATTTGGAGTTTCTACTAATGTTAAGCCTCTAGTTTTAGGCGTTGATGTTGGTCCAG  
 [G, C]  
 GACACTAGGACTCAAATGCCAGATGTCCAGGTCTAAGAGAGAAGAATCAGAAGGTGAAT  
 GCAGAGCCCAGTGGGTTCAAGCCATGTAGACAATAATAGCAGAATGGAGAGACATTTTCC  
 GATGCCTCATGTCTATGCATCTTCTCTCCCTTTCTGGCCTGCCACATAAATTCATTGCAG  
 TGCAACTCTGCCAGATATCAGAATAGAGCAGGAGGAAAGAGAAACAGCTGCAGCATGGGA  
 GATAGGACTCATACCAAGAGAGATTAGGCTCGGTGTGTATACCTAATGATGGTAAAGTGA

29302

CCTCTAGTTTTAGGCGTTGATGTTGGTCCAGGGACACTAGGACTCAAATGCCAGATGTG  
 CAGGTCTAAGAGAGAAGAATCAGAAGGTGAATGCAGAGCCCAGTGGGTTCAAGCCATGTA  
 GACAATAATAGCAGAATGGAGAGACATTTCCGATGCCTCATGTCTATGCATCTTCTCTC  
 CCTTTCTGGCCTGCCACATAAATTCATTGCAGTGCAACTCTGCCAGATATCAGAATAGAG  
 CAGGAGGAAAGAGAAACAGCTGCAGCATGGGAGATAGGACTCATACCAAGAGAGATTAGG  
 [C, -]  
 TCGGTGTGTATACCTAATGATGGTAAAGTGAACAACCAGGTTACAGTGATAGCAGCAACA  
 CGCATTTATCGAGTGTCTTATCCACTTCAGAAACACTATTTTAAATGATAACAATTTCTA  
 CAAGATAAGTATTCATTGATCATCAATATTATCCTTGTTCATGTGTAATACTGGGGCTC  
 AGAGAGGGTAAAAAAGTTGTCCAAGGTCTACAGTTAGGAAATGGTAGAACAGGATTCA  
 GGCTTTGCTCCATGGGGCATCAAGGTCTGCTCCACTTCAGTGTGCCATGCAGTTTCCCC

31093

TCTTTTAGAGTTTCCAGTATAAGAACAAATAGATGAGCAAACACATATAAGAAATACATT  
 GAAGAGAATTAGAATATTCATGAATGTACAGTGAGAAATCTTAACCTATACAGGGTCAT  
 AGTTGACATTCATTTAAATATTTCTAAGGGTAGAACGCAACATTATTAGAATACCTGAGA  
 GGGGAAGGTTGGGACCGTGCCTTGAAGTAGCATATTAATTTAAGAGAGGAAAGAGAAA  
 GCTGGCAATATTTCAAGTCTGGAAGTATCCTTAAGGCAATACTTTGCTGCTGGAATTTG  
 [T, C]



ATTTTAAAGACCAGCCAGAATCTCTTGTGGTCCTTTGCCCATGTAGCCCTATGAGGACGT  
 TTGTATATTTGGATTGCTTGAGGCCTGAGTGTGTCATGGGCATAGGCAGAGTCATTGGATCA  
 ACCCATGTATCTGTTGCTTGACACATTGCTCTGGATACATTGTACCCAAGAAATCAGCCC  
 AAGTGGGATCCAGCCCAAAGAGAATTGTTGATTTTCAAACTGAACAGTCCAGGCAAAG  
 CTCAATCTAGGGCTCAGATCATGCATCCAGGACTGCATAGTTCTTCATTTCTTGATTTCGT

31454 TTGTATATTTGGATTGCTTGAGGCCTGAGTGTGTCATGGGCATAGGCAGAGTCATTGGATCA  
 ACCCATGTATCTGTTGCTTGACACATTGCTCTGGATACATTGTACCCAAGAAATCAGCCC  
 AAGTGGGATCCAGCCCAAAGAGAATTGTTGATTTTCAAACTGAACAGTCCAGGCAAAG  
 CTCAATCTAGGGCTCAGATCATGCATCCAGGACTGCATAGTTCTTCATTTCTTGATTTCGT  
 CTTCTTTGCATTGCTCTATTCTTAGGCAAGTTCATCTTGGAATCCTAAGGTGGCTGCC  
 [G, A]  
 AAGGCTGCAGACCCTCCTCTGTCTTCCAGATTTACATCCTTCAGGAGAGCGAAAGCTCAG  
 TTCCCTAAGGCTGAAACAAAGTCTTGCAATGGCATCTTTTGGTCCTGATTGGCCTGTC  
 TAGGGTCAGATACTCATTTCTTTAATTATCATGGTGGTGATTGGGGGAATCGAATGTGCTA  
 ATTGGCTTTGCTGGGTTGTGTGCTTCACTCATGGAACCTAAGAGAGAAGCCAGTGAAG  
 CCCAATCAAGGGCTGAGAGTGGGCTGTAGTGGTTTCCCTAAACAAATCGGTACTGTTG

31834 AAGTCTTGCAATGGCATCTTTTGGTCCTGATTGGCCTGTCTAGGGTCAGATACTCATTC  
 TTTAATTATCATGGTGGTGATTGGGGGAATCGAATGTGCTAATTGGCTTTGCCTGGGTTG  
 TGTGCTTCACTCATGGAACCTAAGAGAGAAGCCAGTGAAGCCCAACTCAAGGGCTGAGA  
 GTGGGCTGTAGTGGTTTCCCTAAACAAATCGGTACTGTTGACATAATATGGCATGGTCA  
 TGGATGCTGAGAGAATGATGTAGAGAAAGGTGGATGAGAATGGAAGCAGGACTAGGCAC  
 [A, G]  
 GTGGTTCACACTTGTAACCTCAGCTACTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGC  
 CAGGAGTTAGTGACCAGCCTGAGCAACATAGTGAGACCCTATCTCTAAAAAATTTATTT  
 TTAAATTAGCCAAGTGTGGTGTGCTGCCTATAGTCCCAGCTGCTTGGGAGACTGAGGT  
 AGGAGGATCGCTTCAGCCAGGAGTTCAAAGTTACGGTGAGCTATGATTGCACCACTGCA  
 CACTAGCCTGGGTAAACAGAGCAAGACTCTGTCCATAAAAAAGAAGAAGGAGGAGAGAA

31936 TTGGCTTTGCCTGGGTTGTGTGCTTCACTCATGGAACCTAAGAGAGAAGCCAGTGAAGC  
 CCAACTCAAGGGCTGAGAGTGGGCTGTAGTGGTTTCCCTAAACAAATCGGTACTGTTGA  
 CATAATATGGCATGGTTCATGGATGCTGAGAGAATGATGTAGAGAAAGGTGGATGAGAAT  
 GGAAGCAGGACTAGGCACAGTGGTTCACACTTGTAACTTCACTTCTTGGGAGGCTGAGG  
 CAGGAGGATCGCTTGTGCCCAGGAGTTAGTGACCAGCCTGAGCAACATAGTGAGACCCTA  
 [C, T]  
 CTCTAAAAAATTTATTTTAAATTAGCCAAGTGTGGTGGTGCATGCCTATAGTCCCAGC  
 TGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAGCCAGGAGTTCAAAGTTACGGTGAGC  
 TATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAGCAAGACTCTGTCCATAAAAAA  
 GAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGTATGCTAGTTTGGAGGT  
 ATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGA

31947 TGGGTTGTGTGCTTCACTCATGGAACCTAAGAGAGAAGCCAGTGAAGCCCAACTCAAGG  
 GCTGAGAGTGGGCTGTAGTGGTTTCCCTAAACAAATCGGTACTGTTGACATAATATGGC  
 ATGGTCATGGATGCTGAGAGAATGATGTAGAGAAAGGTGGATGAGAATGGAAGCAGGAC  
 TAGGCACAGTGGTTCACTTGTAACTTCACTACTTGGGAGGCTGAGGCAGGAGGATCG  
 CTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCAACATAGTGAGACCCTATCTCTAAAAAA  
 [A, T]  
 TTTATTTTAAATTAGCCAAGTGTGGTGGTGCATGCCTATAGTCCCAGCTGCTTGGGAGA  
 CTGAGGTAGGAGGATCGCTTCAGCCAGGAGTTCAAAGTTACGGTGAGCTATGATTGCAC  
 CACTGCACACTAGCCTGGGTAAACAGAGCAAGACTCTGTCCATAAAAAAGAAGAAGGAGG  
 AGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGTATGCTAGTTTGGAGGTATTGAAGTCCA  
 GGCAAAGAATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGAGAGTGGTGGAT

31980 AGAAGCCAGTGAAGCCCAACTCAAGGGCTGAGAGTGGGCTGTAGTGGTTTCCCTAAACA  
 AAATCGGTACTGTTGACATAATATGGCATGGTTCATGGATGCTGAGAGAATGATGTAGAGA  
 AAGGGTGGATGAGAATGGAAGCAGGACTAGGCACAGTGGTTCACTTGTAACTTCACT  
 ACTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCA  
 ACATAGTGAGACCCTATCTCTAAAAAATTTATTTTAAATTAGCCAAGTGTGGTGGTGC  
 [A, G]  
 TGCCATAGTCCCAGCTGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAGCCAGGAGTT  
 CAAAGTTACGGTGAGCTATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAGCAAGA  
 CTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGT

FIGURE 3, page 63 of 107

ATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGCAGAG  
TGACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCAC

32156 AGCTACTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTG  
AGCAACATAGTGAGACCCTATCTCTAAAAAATTTATTTTAAATTAGCCAAGTGTGGTG  
GTGCATGCCTATAGTCCCAGCTGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAGCCCAG  
GAGTTCAAAGTTACGGTGAGCTATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAG  
CAAGACTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAG  
[T, G]  
GGGTATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGC  
AGAGTGACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAAT  
CCACAGCATTTGCTGATGAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGAT  
TCCTAGGCTTGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTTCTTGAGATAGGTA  
AGAATGGAGGGTTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTG

32161 CTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCAA  
CATAGTGAGACCCTATCTCTAAAAAATTTATTTTAAATTAGCCAAGTGTGGTGGTGCA  
TGCCTATAGTCCCAGCTGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAGCCCAGGAGTT  
CAAAGTTACGGTGAGCTATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAGCAAGA  
CTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGT  
[A, G]  
TGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGCAGAGT  
GACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCACA  
GCATTTGCTGATGAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGATTCCTA  
GGCTTGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTTCTTGAGATAGGTAAGAAT  
GGAGGGTTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTGAGAAG

32436 GAGGCTAAGAAGAAAGGAAGTGGGTATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGA  
ATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGAGAGTGGTGGATGGGTTTGA  
TTTCTAGTTTGGAGATGGAATCCACAGCATTTGCTGATGAAATACATGTTGAAGATGGTA  
AGGAAAATAATTAAAAATGATTCCTAGGCTTGTGGACTGAGTAACTTGGGAGGATGGTGG  
TAGCATTTCTTGAGATAGGTAAGAATGGAGGGTTTTTATTATTTTAAATCAACTATGCT  
[A, G]  
TTCTAGCTCTGTGGGATTTGAGAAGCCTGTTAATATCTGAGTGGGAATGTCAATTGGACA  
GTTGGAGACAGGAGTCTGGAATTTAGAGGGTAGAGCTGGAAATATATATTTCATGGATATA  
TGAATCCATAATGAGAAGGGGTGGCTATAGCAGTTTTTATTTTACTTTTAAAGCCATTT  
AACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGTACAAACCATAAATCACTTCATTTA  
TCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCTGGATGATACACCAGAAA

32490 CAAAGAATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGAGAGTGGTGGATGG  
GTTTGATTTCTAGTTTGGAGATGGAATCCACAGCATTTGCTGATGAAATACATGTTGAAG  
ATGGTAAGGAAAATAATTAAAAATGATTCCTAGGCTTGTGGACTGAGTAACTTGGGAGGA  
TGGTGGTAGCATTTCTTGAGATAGGTAAGAATGGAGGGTTTTTATTATTTTAAATCAAC  
TATGCTATTCTAGCTCTGTGGGATTTGAGAAGCCTGTTAATATCTGAGTGGGAATGTCAA  
[T, C]  
TGGACAGTTGGAGACAGGAGTCTGGAATTTAGAGGGTAGAGCTGGAAATATATATTTCATG  
GATATATGAATCCATAATGAGAAGGGGTGGCTATAGCAGTTTTTATTTTACTTTTAAAG  
CCATTTAACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGTACAAACCATAAATCACTT  
CATTTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCTGGATGATACAC  
CAGAAATACCTCACAGCTTTTCCAGGCACTTTAAAAATCAAATCAAGTAAATAGAAATA

32526 GCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCACAGCAT  
TTGCTGATGAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGATTCCTAGGCT  
TGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTTCTTGAGATAGGTAAGAATGGAG  
GGTTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTGAGAAGCCTG  
TTAATATCTGAGTGGGAATGTCAATTGGACAGTTGGAGACAGGAGTCTGGAATTTAGAGG  
[G, A]  
TAGAGCTGGAAATATATATTTCATGGATATATGAATCCATAATGAGAAGGGGTGGCTATAG  
CAGTTTTTATTTTACTTTTAAAGCCATTTAACTAGTTTATTAAATTGGCGGGCCTTCTT  
GAGAGTACAAACCATAAATCACTTCACTTTATCTTCAACTCCTACCTTCACTCTTGCCCTG  
TGAGGCCAACCTGGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCACTTTAAAA  
ATCAAATCAAGTAAATAGAAATAAAAAATGTACTTTTTTTTTCAGATATTCAAAGTCC

32893 TTATTTTACTTTTAAAGCCATTAACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGT  
ACAAACCATAATCACTTCATTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGC  
CAACCTTGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCACCTTAAAAATCAA  
TCAAGTAAATAGAAATAAAAAATTGTACTTTTTTTTTCAGATATTCAAAAGTCCAGTTT  
ACATGAATCAAAACATCAACCTCTCATCCAATTCAAAGCTCTCTTTAGCCGGGTGAGGT  
[A, G]  
GCTTGTGCCTGTAATCCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCAG  
GAGCTTGAGACCAGCCTGGTGAAACCTGTCTCTACTGAAAATACAAAACTAGCTGGGC  
GTGGTGGTGTGTGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGA  
ACAAGTGGGGAGGACTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGA  
CAGAGCCAGTCCCTGTCCAAAACAAAACCAACAAAAAACCTGTAATCCCAGCACTCTG

32900 TACTTTTAAAGCCATTAACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGTACAAAC  
ATAAATCACTTCATTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCT  
GGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCACCTTAAAAATCAAATCAAGTA  
AAATAGAAATAAAAAATTGTACTTTTTTTTTCAGATATTCAAAAGTCCAGTTTACATGAA  
TCAAAACATCAACCTCTCATCCAATTCAAAGCTCTCTTTAGCCGGGTGAGGTAGCTTGT  
[G, T]  
CCTGTAATCCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCAGGAGCTTG  
AGACAGCCTGGTGAAACCTGTCTCTACTGAAAATACAAAACTAGCTGGGCGTGGTGG  
TGTGTGCTGTAGTCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGAACAAGTG  
GGGAGGACTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGACAGAGCC  
AGTCCCTGTCCAAAACAAAACCAACAAAAAACCTGTAATCCCAGCACTCTGGGAGGCC

33087 AATAAAAAATTGTACTTTTTTTTTCAGATATTCAAAAGTCCAGTTTACATGAATCAAAAC  
ATCAACCTCTCATCCAATTCAAAGCTCTCTTTAGCCGGGTGAGGTAGCTTGTGCCTGTA  
ATCCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCAGGAGCTTGAGACCA  
GCCTGGTGAAACCTGTCTCTACTGAAAATACAAAACTAGCTGGGCGTGGTGGTGTGTG  
CCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGAACAAGTGGGGAGG  
[A, G]  
CTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGACAGAGCCAGTCCCT  
GTCCAAAACAAAACCAACAAAAAACCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGG  
GTACATCACTGAGGTCCGAGTTCAAGACCTGCCTGGCCAAAATGGTAAAACCCGCTCT  
TACTGAAAATACAAAAAATTGGCTGGGCATTGTGGCGGGTGCCTATAATCCCAGATATT  
CAGGATGCTGAGGCAGGAGAATTGCTTGAACCCGGGAGGCAGAGTTTATATTGAGCCGAG

33474 CCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGCGCAGTTCA  
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG  
GGCATTGTGGCGGGTGCCTATAATCCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT  
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG  
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA  
[C, G]  
CTCTCCTTTCCCTGTAGGCCAGGCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG  
GAAGGCGGGGCCGTGGCTGTTCCTTTTCCCTCCTTGTGCACACTCCTTTCCTGTGGCT  
TTGCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGGAGAAGGTGACTAGAAAGCAAGGG  
TGTTTTACTTAGCTGGTGTCTCTTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG  
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGACTTTCCTCTA

33474 CCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGCGCAGTTCA  
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG  
GGCATTGTGGCGGGTGCCTATAATCCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT  
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG  
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA  
[C, T, G]  
CTCTCCTTTCCCTGTAGGCCAGGCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG  
GAAGGCGGGGCCGTGGCTGTTCCTTTTCCCTCCTTGTGCACACTCCTTTCCTGTGGCT  
TTGCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGGAGAAGGTGACTAGAAAGCAAGGG  
TGTTTTACTTAGCTGGTGTCTCTTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG  
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGACTTTCCTCTA

33474 CCTGTAATCCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGCGCAGTTCA  
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG  
GGCATTGTGGCGGGTGCCTATAATCCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT  
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG  
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA  
[C, T, G]  
CTCTCCTTTCCCTGTAGGCCAGGCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG  
GAAGGCGGGGCCGTGGCTGTTCCTTTTCCCTCCTTGTGCACACTCCTTTCCTGTGGCT  
TTGCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGGAGAAGGTGACTAGAAAGCAAGGG  
TGTTTTACTTAGCTGGTGTCTCTTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG  
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGACTTTCCTCTA

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TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG  
TGACAGAGGGAGACTCCATCTCAAACAACAGCAACAACAACAAAACAAAATCACAAA  
[C, T, G]  
CTCTCCTTTCCCTGTAGGCCAGGCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG  
GAAGGCGGGGGCCGTGGCTGTTCCCTTTTCCCTCCTTGTGCACACTCCTTTCCCTGCTGGCT  
TTGCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGAGAAAGGTGACTAGAAAGCAAGGG  
TGTTTTACTTAGCTGGTGCTTCTTATGGTTCTTCTAGTCATGAAATAGTCTCTGTCTTG  
CAGGTGTCAGCTTTTGTGAGTCTTCGCCACCCTGTGAAGACCCCCAGACTTTCTCTA

33741 ACAACAGCAACAACAACAAAACAAAATCACAAAGCTCTCCTTTCCCTGTAGGCCAGGCCT  
GGCCTGAGACACTGCAGATCAGCCATGGGAAAGGGAAGGCGGGGGCCGTGGCTGTTCCCT  
TTCCCTCCTTGTGCACACTCCTTTCCCTGCTGGCTTTGCTGCTTTTGGCTCCACCACAGTC  
AAGGGGCAGGAGAAAGGTGACTAGAAAGCAAGGCTGTTTTACTTAGCTGGTGCTTCTTAT  
GGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTGCAGGTGTCAGCTTTTGTGAGTCTT  
[C, G]  
GCCACCCTGTGAAGACCCCCAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCT  
GGTCTCTTATGACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTT  
TCTCAAGTGGATGGACTTCTTGGGGAAGGCTTTTCTGAAGGCTTTGATGTAGCTTCTG  
ACCCCATCCAGTGCCTACTTGGCCAGGAGAAACCATTAGGCATCTTTGTGCTGCCATAT  
ATGGGGAAGCACGTGACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAA

34043 CCACCCTGTGAAGACCCCCAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCTG  
GTCTCTTATGACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTT  
CTCAAGTGGATGGACTTCTTGGGGAAGGCTTTTTTCTGAAGGCTTTGATGTAGCTTCTGA  
CCCCATCCAGTGCCTACTTGGCCAGGAGAAACCATTAGGCATCTTTGTGCTGCCATATA  
TGGGGAAGCACGTGACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAAC  
[G, A]  
CTGCGCACCCATGTCTGATTTTCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCA  
TTCACATGTGTTCTCCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATC  
TCTCATGCCCTACCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAG  
CTGGGGTTCCAGATGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTC  
TTTCTGCTCCTTCATTTGCCATAGTGCTGCAATGCTATGTGTTCTTTCTGCTAAGAAAT

34053 AAGACCCCCAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCTGGTCTCTTATG  
ACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTTCTCAAGTGA  
TGGACTTCTTGGGGAAGGCTTTTTTCTGAAGGCTTTGATGTAGCTTCTGACCCCATCCAG  
TGCCTACTTGGCCAGGAGAAACCATTAGGCATCTTTGTGCTGCCATATATGGGGAAGC  
ACGTGACTCCACTGTTGCTACCCTCCTCAGCCTGCATTACAGGCCAAACGCTGCGCACC  
[C, T]  
ATGTCTGATTTTCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCATTCACATGTG  
TTCTCCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATCTCTCATGCCC  
CTACCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAGCTGGGGTTCC  
AGATGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTCTTTCTGCTCC  
TTCATTTGCCATAGTGCTGCAATGCTATGTGTTCTTTCTGCTAAGAAATGCTTTTCTC

34297 GACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAACGCTGCGCACCCATG  
TCTGATTTTCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCATTACATGTGTTT  
TCCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATCTCTCATGCCCC  
CCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAGCTGGGGTTCCAG  
TGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTCTTTCTGCTCCTTC  
[A, C]  
TTTGCCATAGTGCTGCAATGCTATGTGTTCTTTTCTGCTAAGAAATGCTTTTTCTCCAGC  
GAATTCTCTTATATGGCTTAGAGATCATATGCAAGCTCTGCATTGATGGATCCTCAGTCT  
TCAGTTTTGAGAGATCTCAGTATAAACCCCAAGACAACAGGAAAGGGCTCACTTAACATT  
GCCTTGTAACAGAGAAACCCTCTCTTTGAATGAAAGCTGTCAGGGAAGCTCAGTATATAA  
AGCAGGTGACATGGTGCTCCATTGGGGTGGTGGGGAACGAGGGGCGGGTGCTCAAGGCT

37209 CAGTGGGGTGGTGAGGAAGGAAGTCCTCGCTGAGGAGGCAGCATTGAGCACTGAGAGGGA  
GCTACCCGTGAAGGCCCTGGGCAAGACTGTTCCAGGTTGAGGGAACAACACAGTGCAGT  
CCCTGAGACTAGAGCTAACTTGGACAAATGAGAAGACCAGTGTGGCTGGGCGGTATTGAG  
GGACAGATGGTAGGAGATGAAGGTGGAGAAGTGGCCATGGCCAGAATTTGGGGATCTAA  
GGACAGGAGTTTGGGAGGTTCTCAAGGAGTTGTGGGAACCCTCTGGGAAGGTTTTCAGC  
[T, C, G]

TGCAGTGAAGGATCGAATTTACATTTTGGCAGGCAGGTTAGGACACTGTTGTGCAGAAA  
CAACAATGGCTAATGGGCTGGTTGAGGTGGGAATGAAAGAAGTGGTGAATGAAATCAGG  
ATGTATTTGGAAGGGAGAGTTGGCTGGACTGGCTGTGGGTGTGAGGGCAGGGTGGAGCCA  
TAGACTACTCTGGATTTTCTGTCCAAGCCCTGGATGAATAGCAGTACCATGAATTGAGAT  
GCACAAGCCTAGGAGAAGAGGCAGATTTGGGATGTGAATGTGTATGAGTGAAAAACAAAT

37475 GGAGTTGTGGGAACCCCTCTGGGAAGGTTTTTCAGCGTGCAGTGAAGGATCGAATTTACAT  
TTTGGCAGGCAGGTTAGGACACTGTTGTGCAGAAAACAACAATGGCTAATGGGCTGGTTGA  
GGTGGGAATGAAAGAAGTGGTGAATGAAATCAGGATGTATTGGAAGGGAGAGTTGGCT  
GGACTGGCTGTGGGTGTGAGGGCAGGGTGGAGCCATAGACTACTCTGGATTTTCTGTCCA  
AGCCCTGGATGAATAGCAGTACCATGAATTGAGATGCACAAGCCTAGGAGAAGAGGCAGA  
[G, T]  
TTGGGATGTGAATGTGTATGAGTGAAAAACAAATTTCTCTTTGAATCATGTTCATGTGC  
TACTTTGGACAAGCAGCTAATTGGACAACCTAAGTGTAATAATTAATAGTGACAATGAGT  
GGAACAAAACGTTAGAGCTGTACATTTTGTCTTTAGAAGGGGCATACTTTTTGTCTTTAGAA  
CGTGTGGCAATCTAATACAAATGGCCAACAAACATATGAAAAATGCTCAACATCACTAA  
TGATAAGGGAGATGCAATCAAAACCACAAAGCGATACTGCCTTACCCCTGCAAGAATGG

38476 GGATGGAATTGGAGACCAACATTCTAAGTGAAGTAACTCAGGAATGGAAAAACCAACAT  
TGTGTGTTCTTACTTATAAGTGGGAGCTAAGCTATGAGGATGCAAAGGCATCCTCATTGG  
ACTTTGGGGACTTGGTGAAAAGGGTGGGGCAGTGAGGGATAAAAGACAGCAAATTGGGT  
ACAGTGTACACTGCTCGGGTGATGGGTGCACCAAAATTTACAAGTCACCACTAAAGAGC  
TTAGTCATGTAACCAAAACACCACCTCTTCCCCAAAAACCTACAGAAATAATAATAAAAAA  
[A, G]  
AACTTGTGGCAATCTAATTGATGATAATTGATGGTAGCATCCATGTTGGGGAAGGAAGGA  
AACAATGCCAAACACTATGCTAGCTGCTTCACATGTATTGTTTTTACAGGGTGTAAAGGC  
TTGAGAAGCATCTAGTGTCTGTGTGAGATTATGCATTCTGGAGGCAGATTGCTAAGGTT  
CAAGTCCTGGCCCTGCCTGTTAGTGGCATGTTCTATGCTTTGCTTGCTTATCTGTAATAAT  
GGAGTAATAATAATACCTTGCTTGTAAGTTATTTTACATTTAAATGAGTTAATGCATG

38486 GGAGACCAACATTCTAAGTGAAGTAACTCAGGAATGGAAAAACCAACATTGTGTGTTCT  
TACTTATAAGTGGGAGCTAAGCTATGAGGATGCAAAGGCATCCTCATTGGACTTTGGGGA  
CTTGGTGAAAAGGGTGGGGCAGTGAGGGATAAAAGACAGCAAATTGGGTACAGTGTACA  
CTGCTCGGGTGATGGGTGCACCAAAATTTACAAGTCACCACTAAAGAGCTTAGTCATGT  
AACCAACACCACCTCTTCCCCAAAAACCTACAGAAATAATAATAAAAAAGAAGTTGTGG  
[C, T]  
AATCTAATTGATGATAATTGATGGTAGCATCCATGTTGGGGAAGGAAGGAAACAATGCCA  
AACACTATGCTAGCTGCTTCACATGTATTGTTTTTACAGGGTGTAAAGGCTTGAGAAGCA  
TCTAGTGTCTGTGTGAGATTATGCATTCTGGAGGCAGATTGCTAAGGTTCAAGTCCTGG  
CCCTGCCTGTTAGTGGCATGTTCTATGCTTTGCTTGCTTATCTGTAAATGGAGTAATAA  
TAATACCTTGCTTGTAAGTTATTTTACATTTAAATGAGTTAATGCATGTAAAGCACTT

38576 TGCAAAGGCATCCTCATTGGACTTTGGGGACTTGGTGAAAAGGGTGGGGCAGTGAGGGA  
TAAAAGACAGCAAATTGGGTACAGTGTACACTGCTCGGGTGATGGGTGCACCAAAATTTT  
ACAAGTCACCACTAAAGAGCTTAGTCATGTAACCAACACCACCTCTTCCCCAAAAACCT  
ACAGAAATAATAATAAAAAAGAACTTGTGGCAATCTAATTGATGATAATTGATGGTAGCA  
TCCATGTTGGGGAAGGAAGGAAACAATGCCAAACACTATGCTAGCTGCTTCACATGTATT  
[A, G]  
TTTTTACAGGGTGTAAAGGCTTGAGAAGCATCTAGTGTCTGTGTGAGATTATGCATTCT  
GGAGGCAGATTGCTAAGGTTCAAGTCCTGGCCCTGCCTGTTAGTGGCATGTTCTATGCTT  
TGCTTGCTTATCTGTAAATGGAGTAATAATAATACCTTGCTTGTAAGTTATTTTACA  
TTTAAATGAGTTAATGCATGTAAAGCACTTGAATAGTGCCTGGTATTGTAATAAACAAT  
AAATGAGCAATTTAATGTTACTATTTTATTTTCTCCGTAGGGTGCACCTCAATAGATGG

38810 GTAGCATCCATGTTGGGGAAGGAAGGAAACAATGCCAAACACTATGCTAGCTGCTTCACA  
TGTATTGTTTTTACAGGGTGTAAAGGCTTGAGAAGCATCTAGTGTCTGTGTGAGATTAT  
GCATTCTGGAGGCAGATTGCTAAGGTTCAAGTCCTGGCCCTGCCTGTTAGTGGCATGTTT  
TATGCTTTGCTTGCTTATCTGTAAATGGAGTAATAATAATACCTTGCTTGTAAGTTAT  
TTTTACATTTAAATGAGTTAATGCATGTAAAGCACTTGAATAGTGCCTGGTATTGTAAT  
[A, G]  
AACAATAATGAGCAATTTTAAATGTTACTATTTTATTTTCTCCGTAGGGTGCACCTCAAT  
AGATGGAAGAGTAGGGCATGTGATAAGGTTGGCTGTGTTCTCATCCAAATCTCATTTTG  
AATTGTAGCTCCATAATTTTACATGTTGTGGGTGGGACCAGGTGGGAAGTAAGTGAAT

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40519 41468 38825

CATGGGGGCGGTTCCCCCATACTGTTCTCGTGGTAGTGAATAAGTCTCATGAAATCTAAT  
GGTTTTATAAGGGGTTTTCCCTTTCACTTGATTCTCATTCTCTCTTGCCCTGCTGCCAAGA

38825 GGAAGGAAGGAAACAATGCCAAACACTATGCTAGCTGCTTCACATGTATGTGTTTTTCAC  
AGGGTGTAAGGCTTGAGAAGCATCTAGTGTCTGTGTGAGATTATGCATTCTGGAGGCAG  
ATTGCTAAGGTTCAAGTCTTGGCCCTGCCTGTTAGTGGCATGTTCTATGCTTTGCTTGCT  
TATCTGTAAAATGGAGTAATAATAATACCTTGCTTGTAAGTTATTTTTACATTTAAATG  
AGTTAATGCATGTAAAGCACTTGAATAGTGCCTGGTATTGTAATAACAATAAATGAGC  
[A, C]  
ATTTTAATGTTACTATTTTTATTTTCTCCGTAGGGTGCACCTCAATAGATGGAAGAGTAGG  
GCATGTGATAAGGTTTGGCTGTGTCTCATCCAAATCTCATTGTAATTGTAGCTCCCAT  
AATTTTCACATGTTGTGGGTGGGACCAGGTGGGAAGTAACGAATCATGGGGGCGGTTCC  
CCCATACTGTTCTCGTGGTAGTGAATAAGTCTCATGAAATCTAATGGTTTTATAAGGGGT  
TTTCCCTTTCACTTGATTCTCATTCTCTCTTGCCCTGCTGCCAAGAAAGACGTGCCTTTCA

39317 CTCGTGGTAGTGAATAAGTCTCATGAAATCTAATGGTTTTATAAGGGGTTTTCCCTTTCA  
CTTGATTCTCATTCTCTCTTGCCCTGCTGCCAAGAAAGACGTGCCTTTACCTTCTGCCAT  
AATTGTGAGGACTTCCAGCCACATGGAAGTGTGAGTCCATTAGCCTCTTTTCTTTTAT  
AAATTAATTACCCAGTCTCAGGTATGTCTTTATCAGCAGTGTCAAAACAGACTAATACAA  
TGTGTTATAACAAGAGTGTACTTCAGAATCTTGTTTTAACTTGTGTATTAGTCAGTGTG  
[C, T]  
AGGATGCTTGGGTTCTGTCTCGTGGTTTTTGCCATGTTTCCATTTTATGAGCAGTTCCTCTA  
TCACAATATAGATGAATGCCTCTATCACAATATAGATGCAGCAATAAGTTGGGATTGCTG  
CATAGCCATCCCAACTTATTGGCATAAAACAAGCATTTTATTATGCTCAGATAATGTGCT  
TCAGGGATTTCATGCAGGACACAGAGGCGATGGTTTTGTCTCTATTCTGCAACGTCTGGGGC  
CTCACCTGGGAAGATGAGCCTCACCTGGGAAATCTACAGGTGTCTGTGGGGTTAGGGGAG

40519 TGTGCAAGATCCTGTGCTAATGGCTGTGGGAGCATATTGAGATGCCACAAGAAGTTGGCA  
TGCTAAAAGGTGAAGACAAATACAGATGGCTTTCAATTAAGTAGTCTCTGGAGAGACAGA  
GGCCACTCACAACCTCTAATGATAGTTAAAATAAACTTATTAGGCCAGGCACAGTGGC  
TCAGGCCCTATAATCCCAGCACTTTGGGAGGCTGAGGTGGGCGGATCACTTGAGGTCAGGA  
GTTCTAGACTACCCCGCCAACATGGCGAAACCCCATCTCTACTAAAAATACAGAAATTA  
[A, G]  
CCAGGCATGGTGGTGCAGCGCTGTAATCCCAGTCACTTGGGAGGCTGAGGCATGAGAGTC  
GCTTGAATCCGGGAGGCAGAGGTTGCAGTGAACCTAAGATGGTGCCACTGCACTCCAGCCT  
GGGCCACAGAGTGAGACTCCACCTCAAAAAACAAACAAACAAACAACTATTTAAAAACA  
AGACACAAAGTGAGTTTAAATGCAAACTTATTTAGTTAGCATTGCATTTAATGTTAGGAA  
CACATGTTCCATTTTGTAGACTTCATTAATTACAACCTAGCAGTTATTTAAGTGCTTACTA

41468 TCTTTCTCCCGTGCTGGATGCTTCTGCCCCCAACATCAGACTCCAAGTTGTTTAGCTT  
TTGGACTCTTGGACTTACACCAGTGGTTTGCCAGGGGCTCTCAGACTTTTGGCCACAGTG  
CACTGTGGCTTCCCTACGTTTGGAGTTTGGGACTTGGGCTGTCTTCTTGCTCCTCAG  
CTTGACAGATGGCCTATTGTGGGACACCTTGTGATCATGTGAGTCAATACTCCTTAATAAA  
TTCCCTTTTCATATGTACATCTATCCTATTAGTTCTGTCTTCTCGAGAGCCCTGACTAAT  
[A, T, G]  
CAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCCAGTCCCCAGGTGCATGCTCAATG  
TGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAATCCAGGTTCTGGATTTTCTTCTTGG  
TGTTCTTTCTCTAGACTTGAGGTTTTGAATTGTGTTCTGAACTCTTTGGGTCCTAAAA  
AAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCAAAGCTCATGTGACTCTAGGCCCT  
TACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTAAATTATATTGTGTTAAACTTAAT

41468 TCTTTCTCCCGTGCTGGATGCTTCTGCCCCCAACATCAGACTCCAAGTTGTTTAGCTT  
TTGGACTCTTGGACTTACACCAGTGGTTTGCCAGGGGCTCTCAGACTTTTGGCCACAGTG  
CACTGTGGCTTCCCTACGTTTGGAGTTTGGGACTTGGGCTGTCTTCTTGCTCCTCAG  
CTTGACAGATGGCCTATTGTGGGACACCTTGTGATCATGTGAGTCAATACTCCTTAATAAA  
TTCCCTTTTCATATGTACATCTATCCTATTAGTTCTGTCTTCTCGAGAGCCCTGACTAAT  
[A, C, G]  
CAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCCAGTCCCCAGGTGCATGCTCAATG  
TGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAATCCAGGTTCTGGATTTTCTTCTTGG  
TGTTCTTTCTCTAGACTTGAGGTTTTGAATTGTGTTCTGAACTCTTTGGGTCCTAAAA  
AAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCAAAGCTCATGTGACTCTAGGCCCT  
TACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTAAATTATATTGTGTTAAACTTAAT

41565 CTCTCAGACTTTTGGCCACAGTGCAGTGTGCGCTTCCCTACGTTTGAGTTTGGGACTT  
GGGCTGTCTTCTTTGCTCCTCAGCTTGAGATGGCCTATTGTGGACACCTTGTGATCAT  
GTGAGTCAATACTCCTTAATAAAATCCCTTTTCATATGTACATCTATCCTATTAGTTCTGT  
CTTTCTCGAGAGCCCTGACTAATGCAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCC  
CAGTCCCCAGGTGCATGCTCAATGTGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAAT  
[A, C]  
CAGGTTCTGGATTTTCTTCTTGGTGTCTTTCTCTAGACTTGAGGTTTGAATTGTGT  
CCTGAATCTTTTGGGTCTTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCA  
AAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTA  
AATTATATTGTGTTAACTTAATATATGATACATAGTATAATGCAATACTTAATATATAT  
TTAATATATTTGTAACATACAAAATACAATATCCAAGAGCAGTATGGAACACCAAAAGGT

41625 GGGCTGTCTTCTTTGCTCCTCAGCTTGAGATGGCCTATTGTGGACACCTTGTGATCAT  
GTGAGTCAATACTCCTTAATAAAATCCCTTTTCATATGTACATCTATCCTATTAGTTCTGT  
CTTTCTCGAGAGCCCTGACTAATGCAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCC  
CAGTCCCCAGGTGCATGCTCAATGTGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAAT  
CCAGGTTCTGGATTTTCTTCTTGGTGTCTTTCTCTAGACTTGAGGTTTGAATTGTGT  
[A, T]  
CCTGAATCTTTTGGGTCTTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCA  
AAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTA  
AATTATATTGTGTTAACTTAATATATGATACATAGTATAATGCAATACTTAATATATAT  
TTAATATATTTGTAACATACAAAATACAATATCCAAGAGCAGTATGGAACACCAAAAGGT  
GTTGAGACTTTTTTTTTTGGAGACAGTCTCGCTCTGTACCAGGCTGGAGTGTGGTGGTGC

41921 GTGTTCTGAATCTTTTGGGTCTTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAG  
AAGCAAAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTG  
AGGTAAATTATATTGTGTTAACTTAATATATGATACATAGTATAATGCAATACTTAATA  
TATATTTAATATATTTGTAACATACAAAATACAATATCCAAGAGCAGTATGGAACACCAA  
AAGGTGTTGAGACTTTTTTTTTTGGAGACAGTCTCGCTCTGTACCAGGCTGGAGTGTGGT  
[G, C, T, A]  
GTGCAATCTCAGCTCACTGCAACCTCTGCCTCCCTGGTTCAAGCAATTCTCCTGCCTCAG  
CCTCCTGAGTAGCTGGGACTACAGGTGCCCACCACCATGCCTGGCTAATTTTTTTTTTGTA  
TTTTTGGTAGAGACGGGGTTTACCATGTTGGCCAGGACGGTCTCGATCTCTTGACCTCG  
TGATCCACCTGCCTTGGCTTCCCAAAGTACTGGGATTACAGGCGTGAGCCCTTCCCTCA  
AATGGAATTTTATATCTGTGTTTACATTTTCTGCTTAAAGTTTGAATTTTGTAAATCA

42152 GAACACCAAAAGGTGTTTCAGACTTTTTTTTTTGGAGACAGTCTCGCTCTGTACCAGGCTG  
GAGTGTGGTGGTGCAATCTCAGCTCACTGCAACCTCTGCCTCCCTGGTTCAAGCAATTCT  
CCTGCCTCAGCCTCCTGAGTAGCTGGGACTACAGGTGCCCACCACCATGCCTGGCTAATT  
TTTTTTGTATTTTTTGGTAGAGACGGGGTTTACCATGTTGGCCAGGACGGTCTCGATCT  
CTTGACCTCGTGATCCACCTGCCTTGGCCTCCCAAAGTACTGGGATTACAGGCGTGAGCC  
[C, A]  
CTTCCTTCAAATGGAATTTTATATCTGTGTTTACATTTTCTGCTTAAAGTTTGAATTTTG  
TTTAATTCATTTGAATTTCCACTTAAATGTAACTTTTGAAACCCACACCTCTGACATA  
TTCCACATTGCTGTTGGATATTTTAGTTTAAAGATTGGCCTGTAAGCTGTATCGGTAT  
CATATTCTAATTCTAGGCTCAAGGTCTCAGTCACTAGTTAAAGTCTTTCTACCGGCAA  
ATCTGTATTACCATCTACTGTGGAAGATAACCTCTAAAGTGCCCATGTAAGCACAAATCC

42498 AAAGTTTGAATTTTGTAAATTCATTGAATTTCCACTTAAATGTAACTTTTGAAACC  
CACACCTCTGACATATTCCACATTGCTGTTGGATATTTTAGTTTAAAGATTTGGCCTGT  
AAGCTGTATCGGTATCATTATTCTAATTCTAGGCTCAAGGTCTCAGTCACTAGTTAAAGT  
CTTTCTACCGGCAAATCTGTATTACCATCTACTGTGGAAGATAACCTCTAAAGTGCCCA  
TGTAAGCACAAATCCATAAACTAAAAGTCAAAGAAAAAGAGAAAGAGTTTATTCCACT  
[G, T]  
TTTAAAGTTTCAGTTTGATTTAGATCTTATATCTTGGGTTTTCTTGACTGATTTTTTA  
CATAAATGTGTCCAGAAAGAGTGATCATATCGTGATCTTGTTCACAGTTTTCCTTTTC  
CACATCAAGTTTTCCTGATGGAAGTGATTTAAAAAACCTTAAAGTGTGATAATCACT  
CTCTTCTTTAGTAGACAGTGGAGTTTAAATAGATGCATACAGCAGTTGTTTACTTGTGATG  
AAAAGAAATGTGAATTTCTGGTGCAAGGACATTTCTAGCTCATGTCTAAATTGCAGAGA

42715 GAAGATAACCTCTAAAGTGCCCATGTAAGCACAAATCCATAAACTAAAAGTCAAAGAAA  
AAAGAGAAAGAGTTTATTCCACTGTTTAAAGTTCAGTTTGATTTAGATCTTATATCTCT  
TGGGTTTTCTTGACTGATTTTTTACATAAATGTGTCCAGAAAGAGTGATCATATCGTGA

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TCTTTGTTCACAGTTTTCCTTTTCCACATCAAGTTTTCCTGATGGAAAGTGATTTAAAAA  
AACCCTTAAAGTGTGATAATCACTCTCTTCTTTAGTAGACAGTGGAGTTTAATAGATGCA  
[T, G, A, C]

ACAGCAGTTGTTTACTTGTGATGAAAAGAAATGTGAATTTTCTGGTGCAAGGACATTTCT  
AGCTCATGTCTAAATTCAGAGAGACCACAGTTTGACATAGTGCTGAAGCAGGTTGTAAG  
AGGTAGGGGTACAATGTATGTCTGCACAGGTTGTGCACTATGCGACTGTGAATGGTGTCT  
TCTGGAATTGTCTATGCGGAAGCACTGTGAGGAGTGTGGATTCCAGCCTCTGTTGATT  
TTTGTGCATGGGAGAGCTTGATACCAAGCCTCAAAGTACTAGGAATAAGAAGGTATTACA

42776 AAGAGAAAAGAGTTTATTCACAGTTTAAAGTTCAGTTTGATTAGATCTTATATCTCTT  
GGGTTTTCTTGACTGATTTTTTACATAAATGTGTCCAGAAAGAGTGATCATATCGTGAT  
CTTTGTTCACAGTTTTCCTTTTCCACATCAAGTTTTCCTGATGGAAAGTGATTTAAAAA  
ACCCTTAAAGTGTGATAATCACTCTCTTCTTTAGTAGACAGTGGAGTTTAATAGATGCAT  
ACAGCAGTTGTTTACTTGTGATGAAAAGAAATGTGAATTTTCTGGTGCAAGGACATTTCT  
[T, C, A]

GCTCATGTCTAAATTCAGAGAGACCACAGTTTGACATAGTGCTGAAGCAGGTTGTAAGA  
GGTAGGGGTACAATGTATGTCTGCACAGGTTGTGCACTATGCGACTGTGAATGGTGTCTT  
CTGGAATTGTCTATGCGGAAGCACTGTGAGGAGTGTGGATTCCAGCCTCTGTTGATT  
TTGTGCATGGGAGAGCTTGATACCAAGCCTCAAAGTACTAGGAATAAGAAGGTATTACAT  
GCTGTAATTTTCAAGGTGGTGCCTTTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTC

43320 GTAATTTTCAAGGTGGTGCCTTTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTCCTC  
TGCAATCTTTGGAGGGTTCCTAGGAATAAAAAAGTAGCTAGTTTGAGACAGTGTGCAATT  
GTGCTGAAATGGAGGACCATGGGGGTAGATGTAGTTCCTTCATGCCAGTAGCTAATTGG  
CTTAGTTTCTGATTTGTTCAGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGC  
TTTGGGCCTTGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGT  
[G, T, C]

CTGAATGCCAAATATTGAGATTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAAA  
CTCAAGCTAAATTTGCAAATTAATACAAAATCATGAAGTGAAGTCTCTTCCAGAGAACC  
TCTTGTAACAGAACTTGAAGGTGGCAGGATGTCTTGATAGAGCGTGGATTTTAGAGCTGG  
ATGCATGCTGGGCTTATATCCTGGTTCCAGCATTGCTTGGGCAAGTTATTTACAACCT  
CTGGTTGAGGTGGTGGACTAGTTGATATCTATGATTCCCTTTTAAAGTAAATAACTATTA

43341 TTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTCCTCTGCAATCTTTGGAGGGTTCCT  
AGGAATAAAAAAGTAGCTAGTTTGAGACAGTGTGCAATTGTGCTGAAATGGAGGACCATG  
GGGGTAGATGTAGTTCCCTTCATGCCAGTAGCTAATTGGCTTAGTTTGCTGATTTGTTC  
AGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGCTTTGGGCCTTGAGGTATGGCA  
TGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGTCTGAATGCCAAATATTGAGA  
[A, T]

TTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAACTCAAGCTAAATTTGCAAATT  
AATACAAAATCATGAAGTGAAGTCTCTTCCAGAGAACCCTCTTGTAACAGAACTTGAAGG  
TGGCAGGATGTCTTGATAGAGCGTGGATTTTAGAGCTGGATGCATGCTGGGCTTATATCC  
TGGTTCCAGCATTTGCCTTGGGCAAGTTATTTACAACCTCTGGTTGAGGTGGTTGGACTA  
GTTGATATCTATGATTCCCTTTTAAAGTAAATAACTATTAGTTTTTTCATACAGTATAATT

43424 GAGACAGTGTGCAATTGTGCTGAAATGGAGGACCATGGGGGTAGATGTAGTTCCCTTCAT  
GCCAGTAGCTAATTGGCTTAGTTTGCTGATTTGTTCCAGGATATTCCCTAAAAATAGGTG  
TCTTCTAAGCCTCAGCTTTGGGCCTTGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTG  
CTGAGCTAAATGCAGTCTGAATGCCAAATATTGAGATTGGAATTATCAAAGGACTATT  
AGCATCAAATTGAGAACTCAAGCTAAATTTGCAAATTAATACAAAATCATGAAGTGAAG  
[A, G, T]

TCTCTTCCAGAGAACCCTCTTGTAACAGAACTTGAAGGTGGCAGGATGTCTTGATAGAGCG  
TGGATTTTAGAGCTGGATGCATGCTGGGCTTATATCCTGGTTCCAGCATTTGCCTTGGGC  
AAGTTATTTACAACTCTGGTTGAGGTGGTGGACTAGTTGATATCTATGATTCTTTT  
AAGTAAATAACTATTAGTTTTTTCATACAGTATAATTACTATATAACAAACATCTTCTTC  
TTTGATTTTATTATGCATTCAAAGTATTTATTAATGCCCTCCAATGCCGGACACCATA

43509 CTGATTTGTTCCAGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGCTTTGGGCCT  
TGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGTCTGAATGC  
CAAATATTGAGATTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAACTCAAGCT  
AAATTTGCAAATTAATACAAAATCATGAAGTGAAGTCTCTTCCAGAGAACCCTCTTGTA  
CAGAACTTGAAGGTGGCAGGATGTCTTGATAGAGCGTGGATTTTAGAGCTGGATGCATGC  
[A, G, T]



GGGCTTATATCCTGGTTCAGCATTTGCCTTGGGCAAGTTATTTACAACCTCTGGTTGAG  
GTGGTTGGACTAGTTGATATCTATGATTCTTTTAAAGTAAATAACTATTAGTTTTTTCA  
TACAGTATAATTACTATATAACAAACATCTTCTTTGATTTCATTTCATGCATTCAAAG  
TATTTATTAATGCCCTCCAATGCCGGACACCATACTAGGTACTGGGTATATAAGAGTGA  
ACCAAATGAGCAGGGTTTCTGCCCTCAGGGAGTTGATAATCTAGTGGGAAGGTGTTGGG

44584 CTTACTCAGGGGAAGGTCAGCCATTTGTTCTATTTCAGGCCTCCAACCGATAGGATGTGG  
ACCACCTATGTCGTGGGAGAAATCTGCTTTACTCACTCTGCTAACTTAAATATGAATCCC  
ATCAGAAAGCACCCTCACAGAAGTACCCAGAATAATGTTTGACCAAATATCTAAGCATCC  
TCTGACACAGTCAAGTTGTACATAAAATGAACTATCCTAGGCTACTTAGAGTAGTCAGA  
AGATACCTCTCTGACATGGTAACATTTAAACTGAGACCCAAAGAATGGGAAGGAGCCAGC  
[C, T]  
GTGGAAGAATGGGGGACAGGCCTTCCAGGCAGAAAGAACTGAGTGGTAACCGAGTGGAA  
ACTGAATGGAAACTGGAGTCCAGAGGAAAAGGGGCATGTTGTGAGATGAAATTAGAGAG  
GGGACAGAGGCTTTACTGTGACACCTTGAAGCCATGATAAGGGGCTTGCATTTTATTCT  
AGATGCAACGATGAGAGGCACTGAGTTTGAACCTTGAAGCCATGATAAGGGGCTTGC  
ATTTTATTCTAGATGCAGTGATGAGAGGCACTGAAAAGTTTGAGCAAGGAGGAATGTGAG

46250 CCATGATTCAATTACCTCCCCCTGGGTTCTCCCAACACATGGGAATTCTGGGAGATA  
CAGTTCAAGTTGAGACTTGGGTGGGAACACAGCCAAATCATATACCCAGTTTAGTACTT  
CACTATGTTTTTGGCCAATTATGTTGGGTAGGGGATGGTTGTGCTCCTCCTGTCCCTTAC  
CTTAGAGCTGGCAGATAAAATACCAGATATCCAGTTAAATTTGAATTTAGAAAATTTT  
TAAAAAGTATAAGTATATCCCAAATATTGCATGGGATATACTTACCCTTTAAAAATTTT  
[A, C, T, G]  
TTGCTATTGTTTATCTGCAATTCAAATTTCACTGGGTGTCTGTATTTTGTTCCTGAA  
TCTGGTAGCACACATTGAATTGCACCCTTTAAATGGCTAGAATAGGGAATTTTATGTTA  
TGTGCATTGTAACGATCTGGC  
AATTCTCCCTTAACTAACTACCATGTAGAAGCTACCATGCGATGCAGTCTATTTCTAGG  
TTTAGCCACAAGGGTCAATAAGAAAATCTGACCTCAAAGGAAATTTATGTCTGGTGATGGT

46287 ACACATGGGAATTCTGGGAGATACAGTTCAAGTTGAGACTTGGGTGGGAACACAGCCAAA  
TCATATCACCAGTTTAGTACTTCACTATGTTTTTGGCCAATTATGTTGGGTAGGGGATG  
GTTGTGCTCCTCCTGTCCCTTACCTTAGAGCTGGCAGATAAAATACCAGATATCCAGTTA  
AATTTGAATTTAGAAAATTTTAAAAAGTATAAGTATATCCCAAATATTGCATGGGA  
TATACTTACCCTTTAAAAATTTTATTGCTATTGTTTATCTGCAATTCAAATTTCACTGGG  
[C, T]  
GTCCTGTATTTTGTTCCTGAATCTGGTAGCACACATTGAATTGCACCCTTTAAAAATGG  
CTAGAATAGGGAATTTTATGTTATGTGCATTGTAACACACACACACACACACACACAC  
ACACACACACACACGATCTGGCAATTTCTCCCTTAACTAACTACCATGTAGAAGCTACC  
ATGCGATGCAGTCTATTTCTAGGTTTAGCCACAAGGGTCAATAAGAAAATCTGACCTCAA  
AGGAAATTTATGTCTGGTGATGGTTAATGCTTCTACTAAATTCCTTAGAGCATAGGATGC

46566 TGCAATTCAAATTTCACTGGGTGTCTGTATTTTGTTCCTGAATCTGGTAGCACACAT  
TGAATTGCACCCTTTAAAAATGGCTAGAATAGGGAATTTATGTTATGTGCATTGTAACAC  
ACACACACACACACACACACACACACACACACACACACGATCTGGCAATTTCTCCCTTAACT  
AACTACCATGTAGAAGCTACCATGCGATGCAGTCTATTTCTAGGTTTAGCCACAAGGGT  
CAATAAGAAAATCTGACCTCAAAGGAAATTTATGTCTGGTGATGGTTAATGCTTCTACTAA  
[A, C, T, G]  
TTCCCTTAGAGCATAGGATGCTGAGCCCATAGTAGGACCTCATCAAATGCTGGTTTGATA  
GAAATTGCATTTGGGGAAAATTAGCAGCTGTTGATAACTGAATGGAAAGAAATGAATAC  
CCTGGTACCTGTGGTACAACCTTAAAGAACACCATGAAATGGGCCTCATGGGAGGTTCTCA  
ATGAATTCACTGGCGTGGCACTTTTGGGCATGCTTTTGAACCAAGTACTTACTCCATGT  
GCCTGTGAGTTTGGCACCTCTCATGGCAGCCCAAGTGCAACTGGTTTCTGAGGGGCCATT

46653 ATAGGGAATTTTATGTTATGTGCATTGTAACACACACACACACACACACACACACACAC  
CACACACACGATCTGGCAATTTCTCCCTTAACTAACTACCATGTAGAAGCTACCATGCG  
ATGCACTATTTCTAGGTTTAGCCACAAGGGTCAATAAGAAAATCTGACCTCAAAGGAA  
ATTATGTCTGGTGATGGTTAATGCTTCTACTAAATTCCTTAGAGCATAGGATGCTGAGC  
CCATAGTAGGACCTCATCAAATGCTGGTTTGATAGAAATGCATTTGGGGAAAATTAGCA  
[G, A]  
CTGTTGATAACTGAATGGAAAGAAATGAACTACCCTGGTACCTGTGGTACAACCTTAAAGA  
ACACCATGAAATGGGCCTCATGGGAGGTTCTCAATGAATTCAGTGGCGTGGCACTTTTGG  
GCATGCTTTTGAACCAAGTACTTACTCCATGTGCCTGTGAGTTTGGCACCTCTCATGGC

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AGCCCAAGTGCAACTGGTTTTCTGAGGGGCCATTAAAAATCTCCCAATGGCAGACAACCTCT  
CAGACATGCCTGCAAATTCCAAGACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTAT

47153 TCTGAGGGGCCATTAAAAATCTCCCAATGGCAGACAACCTCTCAGACATGCCTGCAAATTC  
CAAGACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTG  
TTTCTCCTCCTTTCTGTGAGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTC  
TTCAGAGGCAATTTCCAAGCAATTAAGTATGGGTGAATCCAAAGTGTATTGATGAATTA  
AATTCTGTTCTTGGCTGAAGATTCTGTTCTTGGCTGACACCTGAACCTCAAAGGTTAGA  
[T, A]  
TGAACCTATCTAGGAAACGGTTTTTCTCTTGTGTTTTCTTGCAGGCTTTGCTGTTTACGA  
AGATCTGTCATCAACACTTAGCATTCACTCACATGGCAAGCTTGCATGTGGTACTTTTCAT  
TCCACATTAATTTAGGGAACCTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGA  
TTTTCGAATAGTGTCCCAATTTTATACTGGGGAGTTCCTTGAATGGAAATATGTTCA  
CAGTGGCTGCTTAATTGTGACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTTGA

47171 ATCTCCCAATGGCAGACAACCTCTCAGACATGCCTGCAAATTC AAGACAGCCAGGCTGAT  
CATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTGTTCTCCTCCTTTCTGTG  
AGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTCTTCAGAGGCAATTTCCAA  
GCAATTAAGTATGGGTGAATCCAAAGTGTATTGATGAATTAATTTCTGTTCTTGGCTG  
AAGATTCTGTTCTTGGCTGACACCTGAACCTCAAAGGTTAGATTGAACCTATCTAGGAAA  
[C, T]  
GGTTTTTCTCTTGTGTTTTCTTGCAGGCTTTGCTGTTTACGAAGATCTTGCATCAACACT  
TAGCATTCCTCACATGGCAAGCTTGCATGTGGTACTTTTCATTCCACATTAATTTAGGGA  
ACTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGATTTTCGAATAGTGTCCCA  
CAATTTTATACTGGGGAGTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGT  
GACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTTGATTCTGAGGGTCTAGGAGA

47216 GACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTGTTT  
CTCCTCCTTTCTGTGAGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTCTTC  
AGAGGCAATTTCCAAGCAATTAAGTATGGGTGAATCCAAAGTGTATTGATGAATTAAT  
TCTGTTCTTGGCTGAAGATTCTGTTCTTGGCTGACACCTGAACCTCAAAGGTTAGATTG  
AACTATCTAGGAAAACGGTTTTTCTCTTGTGTTTTCTTGCAGGCTTTGCTGTTTACGAAG  
[A, T]  
TCTTGCATCAACACTTAGCATTCCTCACATGGCAAGCTTGCATGTGGTACTTTTCATTCC  
ACATTAATTTAGGGAACCTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGATTT  
TCGAATAGTGTCCCAATTTTATACTGGGGAGTTCCTTGAATGGAAATATGTTTACAG  
TGGCTGCTTAATTGTGACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTTGATTC  
TGAGGGTCTAGGAGAAGGGACACTTCTCATATGGGGAAGACGGGATTAATCCTTGAAAT

47484 GTGTTTTCTTGCAGGCTTTGCTGTTTACGAAGATCTTGCATCAACACTTAGCAATTCCTC  
ACATGGCAAGCTTGCATGTGGTACTTTTCATTCCACATTAATTTAGGGAACCTCTACTATGT  
GCCAGCATTCAATATCCAATTTGTCTTAGATTTTTCGAATAGTGTCCCAATTTTATAAC  
TGGGGAGTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGTGACTAACCCATC  
ACATAGAGACTGCTTTGGTAATAGATTTGATTCTGAGGGTCTAGGAGAAGGGACACTTCT  
[T, C]  
ATATGGGGAAGACGGGATTAATCCTTGAAATGATACTGAAGCCAACCTTCTGTACCAGTA  
TAGCAGCTTAGCAGACTTCTATATGATCCATGTAAGGGTCTGTTTGCCTCTGAGATTTT  
GGGTGCCTTCTCTAGCCCCCTGAGTGTGGGCTTCTTCTGAATTCATAGGGGTGGAGGTG  
AAGGTACCGCCAGCTCTCACCCAACCTCATCCATCCCTGGACAGCAGGGATTCTGCTCATC  
ACCTTGGTGCCTCCGATGCCTGAAGCACATAGGCCCTCAGCAAACATTTGTTGAATTCA

47668 GAGTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGTGACTAACCCATCACAT  
AGAGACTGCTTTGGTAATAGATTTGATTCTGAGGGTCTAGGAGAAGGGACACTTCTCATA  
TGGGGAAGACGGGATTAATCCTTGAAATGATACTGAAGCCAACCTTCTGTACCAGTATAG  
CAGCTTAGCAGACTTCTATATGATCCATGTAAGGGTCTGTTTGTCTCTGAGATTTTGGG  
TGCCTTCTCTAGCCCCTGAGTGTGGGCTTCTTCTGAATTCATAGGGGTGGAGGTGAAG  
[G, A]  
TACCGCCAGCTCTCACCCAACCTCATCCATCCCTGGACAGCAGGGATTCTGCTCATCACCT  
TGTTGCCTCCGATGCCTGAAGCACAATAGGCCCTCAGCAAACATTTGTTGAATTCATGCC  
ATGAACATTAATCGAGCCCTTTTATACACTGTGCACTGGGATTGGGACCATGGAAATTT  
TAGAGAGGAAAAGGTCCACCTTCAAGGGGCATCTAGAGGAACCTATCCTCTAGCAGGAGA  
AATTGCTAATGAGAAAAGGTATTTTGGGGAGTGGAGTGAGGTGTTGGTCTAGCTGGCAGG

47698 GGCTGCTTAATTGTGACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTGATTCT  
GAGGGTCTAGGAGAAGGGACACTTCTCATATGGGAAGACGGGATTAATCCTTGAAAATG  
ATACTGAAGCCAACTTCTGTACCAGTATAGCAGCTTAGCAGACTTCTATATGATCCATGT  
AAGGGTCTGTTTGTCTCTGAGATTTTGGGTGCCTTCTCTAGCCCCCTGAGTGCTGGGCTT  
CTTCTGAATTCCATAGGGGTGGAGGTGAAGGTACCGCCAGCTCTCACCCAACCTCATCCAT  
[C, T]  
CCTGGACAGCAGGGATTCTGCTCATCACCTTGGTGCCTCCGATGCCTGAAGCACAATAGG  
CCCTCAGCAAAACATTTGTTGAATTCATGCCATGAACATTAATCGAGCCCTTTTATACAC  
TGTGCACTGGGATTGGGACCATGGAAAATTTAGAGAGGAAAAGGTCCACCTTCAAGGGGC  
ATCTAGAGGAACCTTATCCTCTAGCAGGAGAAATGCTAATGAGAAAAGGTATTTGGGGA  
GTGGAGTGAGGTGTTGGTCTAGCTGCGAGGTTACGCTATGCTCAGTGGCTCTCTGGTAT

48029 TGGTGCCTCCGATGCCTGAAGCACAATAGGCCCTCAGCAACATTTGTTGAATTCATGCC  
ATGAACATTAATCGAGCCCTTTTTATACACTGTGCACTGGGATTGGGACCATGGAAAATT  
TAGAGAGGAAAAGGTCCACCTTCAAGGGGCATCTAGAGGAACCTATCCTCTAGCAGGAGA  
AATTGCTAATGAGAAAAGGTATTTTGGGGAGTGGAGTGAGGTGTTGGTCTAGCTGGCAGG  
TTCAGCCTATGCTCAGTGGCTCTCTGGTATGGAATTCCTCAGAATGTTGATTCAGCCA  
[A, T]  
AGATTCTCTGGCAGCACTGACTCTTGCCCTTCCTTCGGCCACATTTTATCCCCAAACCT  
AGGTGTTACTGGGAAGAGACTGAGCTGTTTATTGAAGATAATTGACTTTCCAGTTTTT  
AAGTAAGTCTGTTGATTCCTCGAAGACTTCACTAATCAGAGTTATGAATATTTCAAAAAC  
ACTTCCAGTCTTCAGATGAATGGATTTGTAGGTTTCTACATTGCTGTCTCCCTAGCCC  
CATGAGGAATAATGTGGGTATCCTTTCCCTTTTAGGTTTCTCTCTTCTAACCTGCG

49334 TGAGGCTGCCTGGTTTCTGTAGCAGTGTTCAGCAGCCTGTGACTCTGAGCAGAGAGAAGG  
AATATTATACAGGGATATTTCCAGGTAGCTCCAGGAAAAGACAAAAGGGGAGGAAGTTGA  
GTCTGTTAGCTAAAGAGCAGTGTGTAATATGGGATCCAAGTTGGGTGGAGAAGAGAAAAGA  
GAACACAGGGAGGGTAGGATGACAGGAGAAAAGTAGAGGCAGGGTATGATGTGGGAGCGAT  
GAGGGTAGCAAGCTGGAAAGAGAGGATGATCTAGTCAATGTCTTAGTGTGCCTTAGGGCT  
[A, G]  
CTATAATGAAATACCATAGACTGAGTAGCTTTTGCACAACAGAAATTTATTTCTCATGGT  
TCTGGAGGCTGGGAAGATCAAGATATCAAGGCAGATTCAGTGTCTGGCAAGGATCTGGTA  
CCTGATTGACAGACAGCTGTCTTCTGTGTCTCCTCACTCGGTGGAAGGACCAAGAGAT  
CTCTCTGGGTCTCTTTTATAAGGGCATGAATCCAATTCATGAGGCTCAGCCCTCACCA  
TCTAATCACCCCCAAAGCCCCACCTCCTAATCCCATCACATTGAGGGTTAGATTTTCA

49680 TTTATTTCTCATGGTTCTGGAGGCTGGGAAGATCAAGATATCAAGGCAGATTCAGTGTCT  
GGCAAGGATCTGGTACCTGATTGACAGACAGCTGTCTTCTGTGTGTCTCCTCACTCGGTG  
GAAGGACCAAGAGATCTCTCTGGGTCTCTTTATAAGGGCATGAATCCAATTCATGAGG  
GCTCAGCCCTCACCATCTAATCACCCCCAAAGCCCCACCTCCTAATCCCATCACATTG  
AGGGTTAGATTTAGTGTGTGAATTTTGGGGGACACAAAATTCAGACCGTAGCAGTAAT  
[C, G]  
GCTTCAACTGAGTATTGAGACAGTTCTTGTGGTAACAAGGTTTAGGGTGTGGCCATAGGG  
AGACTCAGCTGTAGTGGAGCTGTTGGGGCTGTGCCAAGGTACCCAGATCCGTTTGTTC  
TGTGCACCTGTCTTTAGCTTCTGGGGCTTCTCTTTCTGGCCTGTACCTACAGCCTT  
TTTCAGAGGACTCTCCTTGGTCTACCGGAGCCTATTTTCAGGATGTCTTAGGAGTTT  
TGAGATGGAGTCTCCCTCTGTCGCCAGGCTGGAGTGCAGCGGCACAATCTCAGTCACT

50056 GGAGCTGTTGGGGCTGTGCCAAGGTACCCAGATCCGTTTGTTCGTGCACCTGTCTCT  
TAGCTTCTGGGGCTTCTCTCTTTCTGGCCTGTACCTACAGCCTTTTTCAGAGGACTCTC  
CTTGGTCTACCGGAGCCTATTTTCAGGATGTTCTTAGGAGTTTTTGTAGATGGAGTCTCC  
CTCTGTGCCCCAGGCTGGAGTGCAGCGGCACAATCTCAGCTCACTCCAACCTCCACCTCC  
TAGGTTCAAGCCATTCTCCAGCCTCAGCCTCCAAGTAGCTTAGATTACAAGCATGCACC  
[A, G]  
CTATGCCTGGCTAATTTTTTTTTTTTTTTTTTTTGTATTTTAGCAGAGCTGGGACT  
TCGCCATGTTGGCCAGGCTGTCTCAAACCTCTGACCTCAGGTGATCCCTGCCTCGGCC  
TCACAAAGTGCTGGGATGACAAAGCATGAGCCACTGCGCCTGGCCATCTAGGAGTTTGT  
TCACCCACTCCTTACGGTTTGTCTGGAGGATCTCTAAATAAATAACTCACAAACAAA  
TTCTCATCCGGGATCTGCTTCTGGGATACCTGCCCTGAGTTAGTGGTTGAGATGGAATGG

51020 AGGGGCCCTGAAGAGGCTGGGGGCATGAGGGAGTCTTCAGATCTTCAGCAGGGGCCCTG  
AGGCATCTTTGGAATGTTTGGGGTAGGGGTGAGGGGAAGGTTGGATCAGAGGGGAGGAG  
GCTGAGAGCAGAAGAGAGAACAAGCTACACCAAGTGGCCTCACTGGCCTCACACTTCTC

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AGAATTGGTCCCTTCAGACCCGGTGGTGGGTGGCTTGGCAGCCTGGATGTGGGGTGTGGA  
GATTGGTACTACTCCTGGCACACAGGGGGCATGCATTGGTTGAATAAACAAATGAATGAC  
[A, T, G, C]  
CATCAAGTTTGTAGATGCCCCACCTTTTCATCATTCTGAACCATTGTCACTTCCATGTAT  
TTTATGGTCTGATAAATATGGAATTAATCGAAGTACCTCTAGCTATTTGTTATCACCATT  
ATTGGGTGGGACACAGCGAACAGATTTCTTAAAGCTAGGGAATTATGCAATAGGACATGT  
TACGGACTTAAGCCATAAGATCCTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAGATAGA  
GTCTCACTCTGTCAACCAGGCTAAAGTGCAGTGGTGAATGTCGACTCACTGCAACCTCC

53750 ATGTCTTTCTGTCCCCACACCTCTGTCAAACACAGCATCTGCACGCTTTGTTGCATTTG  
CTTGATAGAACACGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCTCACGTTGATTG  
AGGACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGTTAAATCTTCCC  
AATAGTGCTACTGCTTCTGTCCCTTTCCAGGGAGGAGGAAGGAGGCTTGGAGAAGGGACT  
GTCTTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCATCGTGAAGACAGA  
[G, T, C]  
CTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCCTCTAAC  
CCTGATAACCTTGTTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTT  
TTTTTTGCCATACCTTTGGTTTATAAATACAAGAAGAGATTTGGGGGAAAATCAGGGGAA  
ACTGTCGAGCTTACAAGTCCCAGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACC  
CCTTGTTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCA

53753 TCTTTCTGTCCCCACACCTCTGTCAAACACAGCATCTGCACGCTTTGTTGCATTTGCTT  
GCATAGAACACGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCTCACGTTGATTGAGG  
ACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGTTAAATCTTCCCAAT  
AGTGCTACTGCTTCTGTCCCTTTCCAGGGAGGAGGAAGGAGGCTTGGAGAAGGGACTGTC  
TTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCATCGTGAAGACAGACCT  
[A, T, C, G]  
TGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCCTCTAACCTT  
GATAACCTTGTTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTTTTT  
TTTGCCATACCTTTGGTTTATAAATACAAGAAGAGATTTGGGGGAAAATCAGGGGAACT  
GTGAGCTTACAAGTCCCAGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACCCCT  
TGTTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCAAT

53799 TGTTGCATTTGCTTGCATAGAACACGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCT  
CACGTTGATTGAGGACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGT  
TAAATCTTCCCAATAGTGCTACTGCTTCTGTCCCTTTCCAGGGAGGAGGAAGGAGGCTTG  
GAGAAGGGACTGTCTTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCATCG  
TGGAAGACAGACCTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCT  
[C, A, T]  
CTTCCTCTAACCTGATAACCTTGTTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTG  
ACTTTTTTTTTTTTTTTTGGCCATACCTTTGGTTTATAAATACAAGAAGAGATTTGGGGGAA  
AATCAGGGGAACTGTGAGCTTACAAGTCCCAGAGAAGGAAGTCACTGCTCCTTTAAGTC  
TCATGTGAACCCCTTGTTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTT  
TTGGGTCTCTCAATCACAGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCAGGAAGGC

53917 GTTAAATCTTCCCAATAGTGCTACTGCTTCTGTCCCTTTCCAGGGAGGAGGAAGGAGCT  
TGGAGAAGGGACTGTCTTTTAGGAGCCCTGCCAGTGTTCCTGTGGAGGGTGGGGCCAT  
CGTGAAGACAGACCTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCC  
CTTCTTCTCTAACCTGATAACCTTGTTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTT  
CTGACTTTTTTTTTTTTTTTTGGCCATACCTTTGGTTTATAAATACAAGAAGAGATTTGGGG  
[C, T, G]  
AAAATCAGGGGAACTGTGAGCTTACAAGTCCCAGAGAAGGAAGTCACTGCTCCTTTAAG  
TCTCATGTGAACCCCTTGTTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTC  
TTTTGGGTCTCTCAATCACAGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCAGGAAG  
GCAGACTCAGGGTAAATCTGCCTGTCTTCCACCAGAGAGGGGACTACCAAGTGTGACT  
CATGCCATTCAATAGAATTTTAAAATCTCACAGTATTTGTACCCCTGAGTAAAAGAG

54056 GTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCCTCTAACCTGA  
TAACCTTGTTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTTTTTTT  
TGCCATACCTTTGGTTTATAAATACAAGAAGAGATTTGGGGGAAAATCAGGGGAACTGT  
CGAGCTTACAAGTCCCAGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACCCCTTG  
TTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCTCAATCA  
[C, T]

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AGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCCAGGAAGGCAGACTCAGGGTAAATTC  
TGCCTGTCTTCCACCAGAGAGGGGACTCACCAAGTGTGACTCATGCCATTCAATAGAATT  
TTTAAATCTCACAAGTATTTTGTACCCCTGAGTAAAAGAGAGGCTTGTAGCTCTTCATG  
AAGGAACAAGAAAGGCCCGAAGTGTGTTTGGAGCCCAGTGAAGTAAATACTGCCCTG  
TCTCTGTCTGTCCACTCTAGCGCTTGTACAAACCATGAAGAACTCTCTTTGGACTGTTT

54402 ACTCAGGGTAAATTCGCTGTCTTCCACCAGAGAGGGGACTCACCAAGTGTGACTCATG  
CCATTCAATAGAATTTTAAATCTCACAAGTATTTTGTACCCCTGAGTAAAAGAGAGGC  
TTGTAGCTCTTCATGAAGGAACAAGAAAGGCCCGAAGTGTGTTTGGAGCCCAGTGAAG  
TAAATACTGCCCTGTCTCTTGTCTGTCCACTCTAGCGCTTGTACAAACCATGAAGAACT  
CTCTTTGGACTGTTTGTCTTTTGAAGTGTAAACACCTTGACTCTGGATTTCTGCCTATG  
[G, A]  
GAAAAAACCAATAGTGCCAGGGGTGCTTCCATATGCAGGATTAAGTCTGCAGTCAAAG  
TTTCTGTTGGGCAGGTGTGTGAACCTTGATATCATAAATGCTGGCCCAAAGCAAATGGGAG  
AATGGATGAATGAACAAATTCAGGAATGAAACAACTGTAACCAGGGGTCTCCTAGTTGT  
AGGTTCTCTGCTAAACTTCATATTGAGACACAAAGGAAGGGCATCTTATAATATAATGTT  
GGGGGATGAGCAGTCAGCTTGGAGGTGGGGACACGTAAGGTGGGTTTGTATGTTTGAGAA

54493 TATTTTGTACCCCTGAGTAAAAGAGAGGCTTGTAGCTCTTCATGAAGGAACAAGAAAGGC  
CCGAAGTGTAGTGTGGAGCCCCAGTGAAGTAAATACTGCCCTGTCTTGTCTGTCCAC  
TCTAGCGCTTGTACAAACCATGAAGAACTCTCTTTGGACTGTTTGTCTTTTGAAGTGT  
AACACCTTGACTCTGGATTCTGCCTATGGGAAAAAACCAATAGTGCCAGGGGTGCTT  
CCATATGCAGGATTAAGTCTGCAGTCAAAGTTTCTGTTGGGCAGGTGTGTGAACCTGATA  
[G, A, T]  
CATAAATGCTGGCCCAAAGCAAATGGGAGAATGGATGAATGAACAAATTCAGGAATGAAA  
CAAAGTGAACAGGGGTCTCCTAGTTGTAGGTTCTCTGCTAAACTTCATATTGAGACAC  
AAAGGAAGGGCATCTTATAATATAATGTTGGGGGATGAGCAGTCAGCTTGGAGGTGGGGA  
CACGTAAGGTGGGTTTTGTATGTTTGAAGGAATTGACCAAAAAAGAGTCAAGAGGTGA  
GAAGAATCTGGGAAGTGAGACCTGTTTCTCTGGGACAGGTGTGAGCGGGTCTGGGTGCTG

54749 CTCTGCAGTCAAAGTTTCTGTTGGGCAGGTGTGTGAACCTTGATATCATAAATGCTGGCCC  
AAAGCAAATGGGAGAATGGATGAATGAACAAATTCAGGAATGAAACAAACTGTAAACAGG  
GGTCTCCTAGTTGTAGGTTCTCTGCTAAACTTCATATTGAGACACAAAGGAAGGGCATCT  
TATAATATAATGTTGGGGGATGAGCAGTCAGCTTGGAGGTGGGGACACGTAAGGTGGGTT  
TTGATGTTTGAAGGAATTGACCAAAAAAGAGTCAAGAGGTGAGAAGAATCTGGGAAG  
[T, C]  
GAGACCTGTTTCTCTGGGACAGGTGTGAGCGGGTCTGGGTGCTGCTGGGTTTGGCTGGGG  
CAAAGGTTGCTTGTGGGGGCGTGGCAGTGGGTGAGGCCTGTGAGATAGGCAGGCGCCAGG  
TCCTGGAAGGGAGAGTCAGGGAGCAAGGCATGGAGCCTGCACCTTACTCTGAATGTTGGT  
GGCGCCTTCAGAGCATTGTTAGCAGGGGTCCATGTGATCACACTGACACCTGAGAGAGTG  
ACACACCATGTACATGGCTGGTATATGGAGGATGGATTTAAGGGGGACAGGACTGAAGGC

55396 GACAGGAAAGCACAGATGTGAGATGAGGTGGCAGGCAGTTCTAGCTCCCTCTTCCCCCA  
GTCTGCCTTGTCTTCTCTCATGGCTCCATAGGGTCTCAGTCATTTTCATCATAGCTT  
GATCTCTTCCATCTGGAAGTGCAGCCTGAAATTTGAAGACAGCAGGGAGCAATGCTTCA  
CCCAAAGGGAGAGCCTCGGGTGGCGTTTTGGGACCATGGCTTGTCTCTTAGTGATACAG  
GACTTAGTGTTACTGCCATTCTTACTGGGATCAGCTTGATTGCCTTTAAGGTAGGGCTGT  
[-, C]  
CATGGAAACAGGGAAAACATGATTTGGTTGTTTGGGTATCTGGAACAGAGGCAGCACAG  
ATACTGCTCTAAGAGCTGCTGGGACAACCTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTG  
GAATCCTGCGCTCCTCATCTTTCCTGCCCTCTTCTTAACACCCCTCCCTCCCCAGCGGCT  
GAAGTCTGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAG  
CCATCAGTGCAGGTGGCCCCGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTGCGCT

55397 ACAGGAAAGCACAGATGTGAGATGAGGTGGCAGGCAGTTCTAGCTCCCTCTTCCCCCA  
TCTGCCTTGTCTTCTCTCATGGCTCCATAGGGTCTCAGTCATTTTCATCATAGCTTG  
ATCTCTTCCATCTGGAAGTGCAGCCTGAAATTTTGAAGACAGCAGGGAGCAATGCTTCA  
CCAAAGGGAGAGCCTCGGGTGGCGTTTTGGGACCATGGCTTGTCTCTTAGTGATACAG  
ACTTAGTGTTACTGCCATTCTTACTGGGATCAGCTTGATTGCCTTTAAGGTAGGGCTGTC  
[-, C]  
ATGGAAAACAGGGAAAACATGATTTGGTTGTTTGGGTATCTGGAACAGAGGCAGCACAGA  
TACTGCTCTAAGAGCTGCTGGGACAACCTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTGG  
AATCCTGCGCTCCTCATCTTCTGCCCTCTTCTTAACACCCCTCCCTCCCCAGCGGCTG

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AAGTCTGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGC  
CATCAGTGAGGTGGCCCCGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTGGGCTG

55703 AACAGGAAAAACATGATTTGGTTGTTTGGGTATCTGGAACCAGAGGCAGCACAGATACTG  
CTCTAAGAGCTGCTGGGACAACCTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTGGAATCC  
TGCGCTCCTCATCTTTCTGCCCCTCTTCTTAACACCCTCCCTCCCCAGCGGCCTGAAGTC  
TGCCATATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGCCATCA  
GTGCAGGTGGCCCCGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTGGCTGCGGGG  
[A, C]  
GGGGGGAGGTGAGAGGAGGCTGTCTTTCCCTCTTGCCCCGGAGTCTGCAGTCACAGTTG  
CACTTTGCCTGGGTGAGTAGCAGAGTCACGCTGCTGTGTGACAGTGGCACTGAGGCAGCT  
GCATTTAGGTTTCCAAGAGACTCTGAACCCCTTGAATGCCATTTGTTTTCAGGTGACATG  
GAGGAATGGAGGCACTCGGGTTAAGTGTCTGAAGATGGATTCAAGGATGCCCTGCTTGT  
TAGCTTGTCTAGGTTGCTCAGTGTCCCCTCTCTGCCCCGTAGTTTCTCTCATCTATCAAT

55783 ACTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTGGAATCCTGCGCTCCTCATCTTTCTG  
CCCTCTTCTTAACACCCTCCCTCCCCAGCGGCCTGAAGTCTGCCTATGCCTATGCAGGCT  
GAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGCCATCAGTGCAGGTGGCCCCGAATG  
ATTCCAGACCTAGAGTAGGGGTGGGAGGTGGCTGCGGGGCGGGGGAGGTGAGAGGAGG  
CTGTCTCTTTCCCTCTTGCCCCGGAGTCTGCAGTCACAGTTGCACTTTGCCTGGGTGAGTA  
[G, A]  
CAGAGTCACGCTGCTGTGTGACAGTGGCACTGAGGCAGCTGCATTTAGGTTTCCAAGAG  
ACTCTGAACCCCTTGAATGCCATTTGTTTTCAGGTGACATGGAGGAATGGAGGCACTCGGG  
TTAAGTGTCTGAAGATGGATTCAAGGATGCCCCGCTTGTAGCTTGTCTATAGGTTGCTC  
AGTGTCCCCTCTCTGCCCCGTAGTTTCTCTCATCTATCAATGGGGGCAGATAATAATCATC  
ACCTTACACAGAAGGTTTGGCGAAGATAAAAACAGGTTCACTGGCTGGGTGCAGTGGCTC

55806 CACCCGAGGTGGAATCCTGCGCTCCTCATCTTTCTGCCCCTCTTCTTAACACCCTCCCTC  
CCCAGCGGCCTGAAGTCTGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTG  
GAAGCTCTGAGCCATCAGTGCAGGTGGCCCCGAATGATTCCAGACCTAGAGTAGGGGTG  
GGAGGTGGCTGCGGGGCGGGGGAGGTGAGAGGAGGCTGTCTTTCCCTCTTGCCCCGG  
AGTCTGCAGTCACAGTTGCACTTTGCCTGGGTGAGTAGCAGAGTCACGCTGCTGTGTGAC  
[A, C]  
GTGGCACTGAGGCAGCTGCATTTAGGTTTCCAAGAGACTCTGAACCCCTTGAATGCCAT  
TTGTTTTCAGGTGACATGGAGGAATGGAGGCACTCGGGTTAAGTGTCTGAAGATGGATTCA  
AGGATGCCCCCTGCTTGTAGCTTGTCTATAGGTTGCTCAGTGTCCCCTCTCTGCCCCGTAG  
TTTCTCTCATCTATCAATGGGGGCAGATAATAATCATCACCTTACACAGAAGGTTTGGCGA  
AGATAAAAACAGGTTCACTGGCTGGGTGCAGTGGCTCATACTTGTAATCCAGCACTTTA

57433 GAAGTAGTCAATCTCATAGACTGGAAAATATTTTAAATGCCTATTTGAAACAAATGTCGT  
TCCTATTTTTTGGGATAAAAGGGCCCTTTCCCCCTGGAATTGCTATGTTTCTCTTTTCC  
TGTTCTTACACTCTGCAGAACTGACTTTGAAGTCAGATGATTCCCTTTTAAATCTGGCTT  
CTCGCTTTTGGGCCGCTTAACCTTGACTTAGCCATTGAACCTGTCTGGGTCTCAGTTTCT  
TTGTCTGTGAAGTGGGGCTGTGTTGGGCATGAGCATGCGCCTACAGGCCTCTAATGGAG  
[G, T]  
GGGTGTTGGTGATCAGGGCCCTGGCTGCTGCCCTGATCTCCACAGCTGGGCTTGCACTGC  
GGGTACGTTGTCTCCCGGCTGCTCCAGCCAGTGTCTGTGCGCAGCAAGGATACCAAGGC  
AGGATTGTTTCTGGGAGACACAGGACTCCTCAGACAGCTAACTTCAGCTCAAGAATCCT  
TGATGGGCTTGCTAAACTTCCCTAGGCTGGAAGATGCTTACCTCCTCCTTCTTCTTCC  
TTCTTTTCCAGGGGTGAGCTTACTTAGAGTCTAGTGGCTGTTCTAGCCTCCCCAACTC

57699 GCATGAGCATGCGCCTACAGGCCTCTAACTGGAGGGGGTGTGGTGATCAGGGCCCTGGC  
TGCTGCCCTGATCTCCACAGCTGGGCTTGCACTGCGGGTACGTTGCTCCCGGGCTGCTCC  
CAGCCAGTGTCTGTGCGCAGCAAGGATACCAAGGCAGGATGTTTCTGGGAGACACAGGA  
CTCCTCAGACAGCTAACTTCAGCTCAAGAATCCTTGATGGGCTTGCTAAACTTCCCTAG  
GCTGGAAGATGCTTACCTCCTCCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT  
[T, A]  
TAGAGTCTAGTGGCTGTTCTAGCCTCCCCAACTCCCTATCATTTTCTCTCACACATGCGT  
TCCCCCTAATAAAATCCATGCACATTTAATCCCTTCTTGGCATCTGCTTCTGGGGTCTCT  
ACCTGGACTCATGCAGTGTGATAATTCCTTGTAGTGAGGACCGAATGTAGTGATGTAAGC  
AGAGTGTGTTGTGAGAGTGACAGCATGAGTAAGTGCCAGTAGGCCATCAGGGCTCCTGTC  
ACCTTACCACCATCAGCACCACCATCCTCATCACCATCTGGCCAAGTTTGCTTCTTGT

60173 TTAATGGACTCACAGTTCCATATGGCTAGGGAGGCCTCACAATCATGGTGGAGGGTAAAT  
GAGGAGCAAAGTCACATCTTACATGGCAGCAGGCAAGAGAGCATGTGCAAGGGAACCCAC  
CTTTATAAAACCATCAGATCTTGTGAGACTTATTCACTATCACGAGAACAGCACGGGGAA  
AAACCTGCCCCCATGCTTCAATTACCTCCCACGGGGTCACCTCCCCAAGATGTAAGGATT  
ATGGGAATACAATTTAAGGTGAGATTTGGGTGGGGACACAGCCAAACCATATCAGGAAAT  
[C, G, A, T]  
TGAACATAATGGAGGGCAGATTCAATTCCTGGGGCTTCCGTAGCAAATTGCCACACATGTA  
GTGGCTTAAAGCAGCACTAATTTATTATTGTATGGTTCTGGAAGTCAGAAGTTCAAAATC  
AGCCTCACTTGGCCAAAATCAAAGAGTAAGCAGTACAGGTTCCCTCGGGAGGCTCTAGGG  
GAGGATCCTTCCCTTGCCTTTTCCAGCTTCTAGAGGGACCACATTCCTGGGCTCATGGCT  
GCATCACTCCAACCTGTGTATCTGTCTCACATCCCTTCTCTCTGGCCCTCTGCTTC

62216 CACATTGTTTCAACAAGGAAGCTAAGGGAGGAGGTGAATTATAAATGGCAGAGAGATAGC  
TTTCAATTTGGACCCTCGTAGAAAAATGTAAGTATTTCAAACCTCAGTTTATACTTTTTTT  
TTTTTTAACTGGGACCCCTGGTGCTTATTTTTTAGAACTCAAATGGGTACCTAGCAACT  
GATCAAATTCCCTAACTGCAGGCTTGGTGAACCAGCGTTTCATCCTCACATTTGAAAGCT  
GGCTCAAAGAAGACATCTGTGCTTTGTCTTGACACGTTTGTATTTATTTATAAACAA  
[C, A]  
TCTCTTCTTCTTTGTCCCCACCCTGACTCCTCAGTGGCCGTTCCCGCAGCAGCACCGGT  
GTGCCAGCCCAAGAGCGCCACTAACGGGCAACCCCGGCTCCGGCTCCGACTCCAACCTC  
GCGCTGTCCATTTCTCTCCAGGCCACAGTGATAGCCAGGATGGAAGGCACCTCCCAAGG  
GGGCTTGCAAGACCGTCATGAAGTGAAGACGGTGGTTGCCATCTTTGTGGTTGTGGTGGT  
CTACCTTGTCACTGGCGGTCTTGTCTTCCGGGCATTGGAGCAGCCCTTTGAGAGCAGCCA

62830 GCCTTGGAGAAGGCGGAATTCCTGCGGGATCATGTCTGTGTGAGCCCCAGGAGCTGGAG  
ACGTTGATCCAGGTGAGCAGGGAGTGAGTCCATCTTAGGCCAGCTGGTGGGGTGGATGGC  
AGTGTGGTTTTATCTTTCTGGGTCTCTAGTCTTGCTTCAGTTGAGAGGCTCTTGGTGG  
TCAGGGAAGTTCTCTCCAGGGAGGTGACATGTGAGCTGAGACCTCCAAGAAGCGATAGTG  
AGGCATGTGACAGTGTGGGGAAGGAGGGTCCATGTTCTGCATCTGGTTTTGGATGAGTG  
[G, C]  
TCAGAGGCGGCAGCAGGCCAATGGACTTTGGATTTTCAAGTTCAAGTCCACCTATGTGTG  
CTGATTAACTCCTTGATTCTGAACTCTGTGGAATGCTGGGATAGAACCCGAAGAAGGAAA  
GAATTTTAAATATGCAGATTTAGAATAAGCAGGGATATATTAACCTGTCCAAGGTCCATG  
AGGATGAGGTAGAGAAGAGGCCACCAGGTATGTGGGTGAAGAGGCTGTCACTGGCCGTGAG  
ACAGCTGTTATAGTGGATTTATGGGGATGAAATAATATGGATCACAGTAGTAGTAATCAT

63395 GGATGAAATAATATGGATCACAGTAGTAGTAATCATCAGGTTTGCTGTTTTTGAATACTT  
ACTGTGTATCAGGCACTGTACTAAGGCCTTTACATACCCTGGATATTAAGGAAAAAGAT  
TCTTAGGAAAATGGAAGCAGAGAACTTGAAGTGCAGCCTAAAGAAGCAAGGCAACACTTC  
TGGGCGACAGATGTGACTTGGCAGGGGTGACTGTGGCGGTAAAGAGCTATAGGAAAGC  
CAGAGAGTCATCTGTGGGGCTGCGGTGCGAGGACTGGATCAGGAGGGTTGTGAAGTCTG  
[G, A]  
GAAGCCAGAGAGAAAAGCAGTTCACACGAGGAAGAAAGGAAATGGTGGAGAGCCCTGTT  
GGAGGGCTTCACCTTGGACGTGAAGGAGGAAGGCTGCCTCTGAGGCTGAAGTTCCACTTT  
CTATCCCAGACACCCCTCCTGAACTACAAAGAGTGGGTTTTGGTGAAGGCGGTGACATTT  
ATGGAGGTGAGGGAGAGTCTCATCTTTCTGGGGGCTCTAAAGTTTGGGAAGGTGGAGGAT  
GGAAAAGACAGCTTTTACAATTCCTTCTGGCTCTGGAAGATGCACATTAATTTCTAATGG

64019 GGATTTACCAGTCTGCGCTGTTTTCTTATTTATTTATTTCTTACCATACCAATAGAGTAG  
GGGAATCTGTATGCTGCTTATGATCTGGCACCTTCATAGCAATCATATCTTGTCACTTA  
GTTTTAATAATGACTTGACTCTTAAATAAATAGAAATACAAATCTTCCCTTCTGGGAG  
TAAATATGATTTCATAGCTATGCCCTATAATTCTTCTCAAAAAATAAATGTTAAAAAT  
CCAAGGGCAGCATTTTATATAAGTGTTCATAGGAAGTCAGTTCTCCAAATGGCTTTGTCT  
[T, -]  
TTTTTTTTTTTTTTTTTTTTTGTAGACAGGGTCTCATTCTGTCACTTAGGCTGGAGTG  
CAGTGGTGTGATCATGGCTCATTGCAGGTTCAACTTCCTGATCGAGGTATCAGCTGATCC  
TTCTGCCTCAGTCTCCTGAGTAGCTGGGACTACAGGCATGTGCCACCATGCCTGGCTACT  
TTTTGCATTTTTTTGTAGAGACAGGTTTTTCCCATGTTGCCAGGCTGGTCTTGAATTC  
TAGGCTCAAGCAATCAACCCGCTTGGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGTC

64030 TCTGCGCTGTTTTCTTATTTATTTATTTCTTACCATACCAATAGAGTAGGGGAATTCTGA  
TGCTGCTTATGATCTGGCACCTTCATAGCAATCATATCTTGTCACTTAGTTTTAATAAT  
GACTTGACTCTTAAATAAATAGAAATACAAATCTTCCCTTCTGGGAGTAAATATGATT

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TCATAGCTATGCCCTATAATTCTTCTCAAAAAATAAAATGTTAAAAATCCAAGGGCAGC  
ATTTTCATATAAGTGTTCATAGGAAGTCAGTTCTCCAAATGGCTTTGTCTTTTTTTTTTTT  
[T, -]

CTTTTTCTTTTTTGAGACAGGGTCTCATTCTGTCACTTAGGCTGGAGTGCAGTGGTGTGA  
TCATGGCTCATTGCAGGTTCACCTTCCTGATCGAGGTATCAGCTGATCCCTCTGCCTCAG  
TCTCCTGAGTAGCTGGGACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTT  
TTTGTAGAGACAGGTTTTACCATGTGCCCAGGCTGGTCTTGAATTCCTAGGCTCAAGC  
AATCAACCCGCCTTGGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCAT

64104 TGGCACCTTCATAGCAATCATATTCTTGTCACTTAGTTTTAATAATGACTTGACTCTTAA  
ATAAATAGAAATACAAATTCTTCCCTTCCTGGGAGTAAATATGATTTTCATAGCTATGCC  
TATAATTCTTCTCAAAAAATAAAATGTTAAAAATCCAAGGGCAGCATTTCATATAAGTG  
TTTCATAGGAAGTCAGTTCTCCAAATGGCTTTGTCTTTTTTTTTTTTTCTTTTTCTTTTT  
GAGACAGGCTCTCATTCTGTCACTTAGGCTGGAGTGCAGTGGTGTGATCATGGCTCATTG  
[C, A, G, T]

AGGTTCAACTTCCTGATCGAGGTATCAGCTGATCCTTCTGCCTCAGTCTCCTGAGTAGCT  
GGGACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTTTTTGTAGAGACAGG  
TTTTACCATGTGCCCAGGCTGGTCTTGAATTCCTAGGCTCAAGCAATCAACCCGCCTT  
GGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCATCCCTTTTCTTCTT  
CATGGGAAAATGCTACCACATTTGTGGTGATGAGATTTTGTACTAATCAGTGCCAGATT

64166 AAATAGAAATACAAATTCTTCCCTTCCTGGGAGTAAATATGATTTTCATAGCTATGCCCTA  
TAATTCTTCTCAAAAAATAAAATGTTAAAAATCCAAGGGCAGCATTTCATATAAGTGTT  
TCATAGGAAGTCAGTTCTCCAAATGGCTTTGTCTTTTTTTTTTTTTCTTTTTCTTTTTGA  
GACAGGCTCTCATTCTGTCACTTAGGCTGGAGTGCAGTGGTGTGATCATGGCTCATTGCA  
GGTTCAACTTCCTGATCGAGGTATCAGCTGATCCTTCTGCCTCAGTCTCCTGAGTAGCTG  
[G, T]

GACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTTTTTGTAGAGACAGGTT  
TTCACCATGTGCCCAGGCTGGTCTTGAATTCCTAGGCTCAAGCAATCAACCCGCCTTGG  
CCTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCATCCCTTTTCTTCTTCA  
TGGGAAAATGCTACCACATTTGTGGTGATGAGATTTTGTACTAATCAGTGCCAGATTTA  
AAGCTAGCATGCTATAGAGAATGGAATAAACAATTCTGGAGTAGTTTTAAGTAGGAGTA

64408 TTCAACTTCCTGATCGAGGTATCAGCTGATCCTTCTGCCTCAGTCTCCTGAGTAGCTGGG  
ACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTTTTTGTAGAGACAGGTTT  
TCACCATGTGCCCAGGCTGGTCTTGAATTCCTAGGCTCAAGCAATCAACCCGCCTTGGC  
CTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCATCCCTTTTCTTCTTTCAT  
GGGAAAATGCTACCACATTTGTGGTGATGAGATTTTGTACTAATCAGTGCCAGATTTAA  
[A, G]

GCCTAGCATGCTATAGAGAATGGAATAAACAATTCTGGAGTAGTTTTAAGTAGGAGTATA  
ATTACATTTTATACATTGTGTGATATGAGGTAGGATCCTTTTTTAATTAGTTGTAAGAC  
ACGTCATAATAACCTGATAGGCGTTCTGAAGTGAATCTAGTATTGTGTTTGAATTTTCTT  
TCATTAGGCAGTAAGATCTTGAAGAAAAGGAATGCACTGTGTTACCTTTTCTCCACATG  
TGACCTATGCTTTGCTTTGCCCTCAATTATTGCCCATTAGATAAATGTTTTTAGAGCAAG

64786 TGTGTGATATGAGGTAGGATCCTTTTTTAATTAGTTGTAAGACACGTCATAATAACCTGA  
TAGGCGTTCTGAAGTGAATCTAGTATTGTGTTGAATTTTCCTTCATTAGGCAGTAAGAT  
CTTGAAGAAAAGGAATGCACTGTGTACCTTTTCTCCACATGTGACCTATGCTTTGCTT  
TGCCTCTAATTATTGCCATTAGATAAATGTTTTTAGAGCAAGATATCAAAGCAAATTGT  
AGAACACTGGTGATGTCAAGCTATCTGAGCTTATCCATGCATTTGTGATTAATTTCGG  
[C, T]

ATTTCCGTATTGCCATTCTTTAACCTCATCTTTATGAGAGAGCTCAGAGACCTGAATG  
AAGGACAGGGTCAGAGAGCGTGGAGTCTTATTCTGATGCTGCCATTAAGACTGGTGTG  
CTGTTTTGACCTCAAAGATTTCTCTGTGAAATGAGATATGTGTGTATGTGTGCGTTTG  
TGTGAATGTGTTTGCACATACACAGTGTGTGCATTTAAGATAATTTTATAACAATTTAA  
AAAGCTGCTCTTTATTAGGCATCTGTTATGAGCTGGGCATCATATACCCATTATCTCATT

65120 TTATGAGAGAGCTCAGAGACCTGAATGAAGGACAGGGTCAGAGAGCGTGGAGGTCTTAT  
TCTGATGCTGCCATTAAGACTGGTGTCTGTTTGGACCTCAAAGATTTCTCTGTGAAATG  
AGATATGTGTGTATGTGTGCGTTTGTGTGAATGTGTTTGCACATACACAGTGTGTGC  
ATTTAAGATAAATTTATAACAATTTAAAAAGCTGCTCTTTATTAGGCATCTGTTATGAGC  
TGGGCATCATATACCCATTATCTCATTTAATCTTATCAACAACACTCTAAGTTCATATCA  
[A, G, C]

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GATTCCCATTTTACAGGGGAGGAAACATCAGTTTCCTTAAAGAGGTGAGTAACTTTCCAA  
 CCACCAAAGTGGTAGAGCTGGTAGTCAGCGCAAGGTTGGACTGACTGTACACTCTCTCAT  
 CCAAATAGTCTACAGGCCCTTTAAGTAGATCTTGGTTTATAATAAGCTCCAGTCTCTTTT  
 AAACCTTGCTTTTATGTTGAATGCTGTATTAGTCCATTCTCATAAAGAACTATCTGA  
 GACTAAGCAATTTATAAAGAAAAGAGGTTTAATTGATTACAGTTCCGAGGCTGTGCAG

65703 GTTCCGCAGGCTGTGCAGGAAGCATGGCTTGGGAGGCTTCAGGAAACTTACAATCATGGC  
 AGAAGACGAAGGGGAGGCAGGCATGTCTATATGGCTGGAGCAGGAGGAAGAGAGAGCAA  
 AGGGAGGGATGCTACACACTTTTAAACAACCATATCTTGGCCTGGCGCGGTGGCTTACAC  
 CTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGTGGATGACCTGAGATCAGGAGTTCGA  
 GACCAACCTGGCCAACATGGTGAAACCCCATCTCTACCTAAAATACAAAATTAGCCAGG  
 [C, T]

GTGGTGGTGTGCACCTGTGGTCCCAGCTACTAGGGAGGCTGAGGCAGAAGAATTGCTTGA  
 ACCTGGGAGGCAGAGGTTGCAGTGAGCCGAGATCATGCCACTGCACTCCAGCCTAGGCAT  
 CAGAGCATGACTCTCTCAAAACAAAAACAAAAACAAAAAGCCAAACAAACAGATTTTCATG  
 AGAACTCACTCACTATCACAAGAACAGCAAGAGGGGAAATCTGCCCCACCATAACCCCTTC  
 TCCTACACTGGGGATTACAATTCAACATGAGATTGTTGGGCAGGGACATAAATCCAAACCAT

66930 ATGCCTCTGAGCAGCACTGTATGTAGCGATCACAAGAAACACAGTATTTAAAAATAGTCT  
 GTTTTCACATCTGGAAGGGTTTTAGTGTGCTGTGTTTAAAGTTGGAAAGATAGTACTAT  
 TGTATCTCACCAAGTCTGAAAGGAGTGACTGGAGAGTAGAAAGTAGATGGAAAGTATTT  
 ATTTTCATGCTCTCTTGGCTGGATTGAGTGAACCCCTCATAAAGCCAAGCTGGAATGTG  
 TGCTTCATATTTATTAATAACCAAAATAGAGTATCCAGAGAAGCATGATACCCTCAAAATG  
 [C, G]

CTGGATAGCCTAGAAGAGCCTTAGCTCTTACAGCCATCGTGGGGAGGGATTTTCCAACAA  
 GTAAGACCACTTCATGGGGTACTGTGGGACTCCAGAGGAGAGTAATGGGCCACTATCCCT  
 AAAGGTGAAGAAAGATGGGTGCTGTATGAAGGGGACATTCTCATCCATTCACTTAGTC  
 ATTCATTTCATCTATCCATCCATCCACTTGTCTCAGAATTGCTGCTGAACCTCTGCATGT  
 ATCAGGTAACATGCCAGGTGTTGGGGAGAGAAAGAAGAAGACACGGCCGGGTTCGGTGGC

66951 TGTAGCGATCACAAGAAACACAGTATTTAAAAATAGTCTGTTTTTCACATCTGGAAGGGTT  
 TTCAGTGTGCTGTGTTTTAAGTTGGAAGATAGTACTATTGTATCTCACCAAGTCTGAA  
 AGGAGTGACTGGAGAGTAGAAAGTAGATGGAAAGTATTTATTTTCATCATGTCTCTTGGCT  
 GGATTGAGTGAACCCCTCATAAAGCCAAGCTGGAATGTGTGCTTCATATTATTAATAAAC  
 AAAATAGAGTATCCAGAGAAGCATGATACCCTCAAAATGCCTGGATAGCCTAGAAGAGCC  
 [T, G]

TAGCTCTTACAGCCATCGTGGGGAGGGATTTTCCAACAAGTAAGACCACTTCATGGGGTA  
 CTGTGGGACTCCAGAGGAGAGTAATGGGCCACTATCCCTAAAGGTGAAGAAAGATGGGTT  
 GCTGTTATGAAGGGGACATTCTCATCCATTCACTTAGTCATTCACTCATCTATCCATCCA  
 TCCACTTGTCTCAGAATTGCTGCTGAACCTCTGCATGTATCAGGTAACATGCCAGGTGT  
 TGGGGAGAGAAAGAAGAAGACACGGCCGGGTTCGGTGGCTCACGCCGTGAATCCCACCAC

68094 GAGACATTTTTGGTTGTTACAGCTGGGGAGGTGCTATAGACATCTAGTGGGTAGAGGCCA  
 GGGTTGCTGTGCTAGACATCCTACAATGCACAGCATAGACCCCCCTCCACAAAGAATTAT  
 CCAGTTCAACATGCTCATAGGTTGAGAAGCACTGGAGGAAGAGGCATGAAGCCAATAAT  
 TACAATCTTTTGAATAGAGCTATCTGAAAGACGTCCAAAAAATGGAGCCCTAGTGAGGC  
 AAATAGAGCTCAGAGAATATTTTGTGGTTATTTATCTCCTTCAGTCCCCACAGCTGTTCT  
 [G, A]

TGAGGATAATCTTTGGTGCCACATACAGACGAGGAAATGAGGCAGCAGGAGCTGAAATG  
 ATGGCTTAAGTTCACCTGGTTAGAAATGGAGGATCCAGGGTTTACTGCCAGGCAGTCTGA  
 CCACATATCCCAGGCTCTGAACCACCATGCACTGGAACAGAAACACGATATCTGGGAGGG  
 ATTCATTGGGTAGGCCATGGTTGGAGGGTATCCCAATGGCTGGCATGTGGCCCATGGGAA  
 AATGCTAACAAAGTTTGTGGTGACAAGAATGTTATACTAATCAGTTCAGATTGAGGCAT

68124 GTGCTATAGACATCTAGTGGGTAGAGGCCAGGGTTGCTGCTAGACATCCTACAATGCACA  
 GCATAGACCCCCCTCCACAAAGAATTATCCAGTTCAACATGCTCATAGGTTGAGAAGC  
 ACTGGAGGAAGAGGCATGTAGCCAATAATTACAATCTTTGGAATAGAGCTATCTGAAA  
 GACGTCCAAAAAATGGAGCCCTAGTGAGGCAAAATAGAGCTCAGAGAATATTTTGTGGTTA  
 TTTATCTCCTTCAGTCCCCACAGCTGTTCTGTGAGGATAATCTTTGGTGCCACATACAG  
 [A, G]

CGAGGAAATGAGGCAGCAGGAGCTGAAATGATGGCTTAAGTTCACCTGGTTAGAAATGGA  
 GGATCCAGGGTTTACTGCCAGGCAGTCTGACCACATATCCCAGGCTCTGAACCACCATGC  
 ACTGGAACAGAAACACGATATCTGGGAGGGATTCACTGGGTAGGCCATGGTTGGAGGGTA

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TCCCAATGGCTGGCATGTGGCCCATGGGAAAATGCTAACAAGTTTGTGGTGACAAGAATG  
TTATACTAATCAGTTCCAGATTTGAGGCATTGAAAGTGATCAGAATGGCTTGAAGTGA

68787 CTTAGAGGACCTTTATGTTGTGGAATGTGAGTCACTGAAAGCTTTAAGCGAGGCTTGGGA  
AGATGGAAATTGGCTGCTGAAAAAACCTTTTAGCAATGAGGAAGTTGGGTTGGAGGAAGG  
AGAAACGGGAAGAAGGAAGACCAGTTAGAATGTTGCAACATCACAGGTGAGGGATGCTGA  
GAGATAGAGAAAAGGCTATATTTAAGAAAGTTGACAGAGAAAACCTTGAAAATTACTCAAA  
CCTGACTCAGCAAAGATTTCTGCTATGTGCTGCATATCCCTGCATGGCCGTGAGCCCCCA  
[A, G]  
GACTCGGGGGTTAATCTCCCCACGTTAAATCCTATACCACTTAATGAGCTGAGTGAATTG  
GGCAAATATCATGTTGCCCCGGCCTCACTGCTCTTCTGTGAAATGGAGATTGCGATCACG  
GTGTCTACCTGTTAGACACTATGGTGGTCTGAGGATTAACAAAAAGAAGCTCAGTAACTT  
TGAGCTCTTGTTATTGCTGCTGCTTATTTGTTAGGGAAGGAAGAAAAAAGAAACCAGAA  
AACTCCTAACTGATGCCCATCGTGGAGTTCTGCTGAGGGAAGAGAGAAGAAGGTGTCTGA

69668 CACTGATCTCTCTCCCCGCTGCTTCTCTGGTTTGAGGCACAGTTTCAGAGAACCTGAGGG  
ACCCGGTGGGCTCAGGCGGCCTCAAAGCAGCAGGTACCTGACCAGTGAGTGACCACAG  
ATTCCAAGGTGTGACCGAGTGAAAGGGCTTATATCCCAATGCCTGACTGCAGTTAAACC  
CTAATGAGGTATGTGGATCTTCTAGAGGAAGGGCCAGGCCCTTTAATAAGGACCCTTCT  
GAACAAAGAGACAAGATGCTAATCCGAATTCCTAGGACCAAGTTTGATGTCCTAGGGC  
[C, A]  
AGCCGCTTAACCCGAGCTGGGGCTCAGCAGTTAAGCACATAGAGGACACAAAAGATGCAT  
CCGTCTCTAGAATCTTACCCCTGAGATGTGAGGGAGTGTGCAGACGATTGTAAATGGGTA  
ACTTCCTGCAGAGCTGGTGTAAATAATAAATATAGCTACCACCTACTGATTGTTACTTT  
CCTCTAGACTCTGTTCTAAGTGCTTGAATCCTCTAGCTCATTTAACTCTTGCAAGAAGCC  
TACAAAGTAGGTACTTTTTTTTATTCCTTTTTTTTAAACAGGGTCTTGCTCTCTTACCC

69701 GAGGCACAGTTTCAGAGAACCTGAGGGACCCGGTGGGCTCAGGCGGCCTCAAAGCAGCAG  
GTCACCTGACCAGTGGAGTGACCACAGATTCCAAGGTGTGACCGAGTGAAAGGGCTTATA  
TCCCCAATGCCTGACTGCAGTTAAACCCTAATGAGGTATGTGGATCTTCTAGAGGAAGGG  
CCAGGCCCTTTAATAAGGACCCTTCTGAACAAAGAGACAAGATGCTAATCCGAATTCCTA  
CTAGGACCAAGTTTGATGTCCTAGGGCCAGCCGCTTAACCCGAGCTGGGGCTCAGCAGTT  
[A, C]  
AGCACATAGAGGACACAAAAGATGCATCCGTCTCTAGAATCTTACCCCTGAGATGTGAGG  
GAGTGTGCAGACGATTGTAAATGGGTAACTTCTGCAGAGCTGGTGTAAATAATAAATAT  
AGCTACCCTTACTGATTGTTTACTTTCTCTAGACTCTGTTCTAAGTGCTTGAATCCTC  
TAGCTCATTTAACTCTTGCAAGAAGCCTACAAAGTAGGTACTTTTTTTTATTCTTTTTT  
TTAAACAGGGTCTTGCTCTCTTACCCACACTGGAGTGCAAGTGCATGTTTCACTGTTTCA

69773 GTGGAGTGACCACAGATTCCAAGGTGTGACCGAGTGAAAGGGCTTATATCCCCAATGCCT  
GACTGCAGTTAAACCCTAATGAGGTATGTGGATCTTCTAGAGGAAGGGCCAGGCCCTTT  
AATAAGGACCCTTCTGAACAAAGAGACAAGATGCTAATCCGAATTCCTAGGACCAAGT  
TTGATGTCCTAGGGCCAGCCGCTTAACCCGAGCTGGGGCTCAGCAGTTAAGCACATAGAG  
GACACAAAAGATGCATCCGTCTCTAGAATCTTACCCCTGAGATGTGAGGGAGTGTGCAGA  
[C, T]  
GATTGTAAATGGGTAACTTCTGCAGAGCTGGTGTAAATAATAAATATAGCTACCCTTA  
CTGATTGTTTTACTTTCTCTAGACTCTGTTCTAAGTGCTTGAATCCTCTAGCTCATTTAA  
CTCTTGCAAGAAGCCTACAAAGTAGGTACTTTTTTTTATTCTTTTTTTTAAACAGGGT  
CTTGCTCTCTTACCCACACTGGAGTGCAAGTGCATGTTTCACTGTAGCCTGGAA  
CTCCTAGGCTCAAGCAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTT

70257 GCTCTCTTACCCCACTGGAGTGCAAGTGGTGCATCATGGTTCACTGTAGCCTGGAACCTC  
CTAGGCTCAAGCAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTTGGT  
CCAATCCCCCTCAGAGTGAGCAGGTTATCTCACTCCCTGGAAGGCTGGCTTCTCCCCTGCC  
TCTCTTCGGTGCTTGCCTCCAGCAAGTTACTGAAGTCTCAGAGGCCTCTCCACCGTGAA  
ATGGACACTGTCTGTCTGTGGGACTACAGGTGGATACCACCAGACCAGCTAATTTTTTAA  
[-, T]  
TTTTTTTTTTTTTTGGTAGAGACAGGGTCTCACTGTGTTGCTCGTGCTGGTCTGAAACT  
CCTGGCCTCAAGCAATCCTCCACCTCAGCCTCCCAAGTGCTGATATTACAGGTTTGAG  
GCACCATGCCAGTCTGAAGTAGGTTCAATCATCATCTCATTTTATGGATGAGGAAATAA  
ATCCCAAGAAGTTAAATAACTTGTCCAAGTCCAGACAGCCAATAAGTGATTAACTTGGAA  
TTTGAGCCCTGGGAAGCCAGACTCCAGAGCCACACAACCTGAACCTTGTGCCATACTGC

70261 TCTTACCCACACTGGAGTGCAGTGGTGCAATCATGGTTCACTGTAGCCTGGAACTCCTAG  
GCTCAAGCAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTTGGTCCAA  
TCCCCTCAGAGTGAGCAGGTTATCTCACTCCCTGGAAGGCTGGCTTCTCCCCTGCCTCTC  
TTCGGTGCCTTGCCTCCAGCAAGTTACTGAAGTCTCAGAGGCCTCTCCACCGTGAAATGG  
ACACTGTCTGTCTGTGGGACTACAGGTGGATACCACCAGACCAGCTAATTTTTTAATTTT  
[-, T]  
TTTTTTTTTTTTGGTAGAGACAGGGTCTCACTGTGTGCTCGTGTGGTCTGAAACTCCTG  
GCCTCAAGCAATCCTCCCACCTCAGCCTCCCAAAGTGCTGATATTACAGGTTTGAGGCAC  
CATGCCAGTCTGAAGTAGGTTCAATCATCATCTCATTTTTATGGATGAGGAAATAAATCC  
CAAGAAGTTAAATAACTTGTCCAAGTCCAGACAGCCAATAAGTGATTAAACTTGGATTG  
AGCCCTGGGAAGCCAGACTCCAGAGCCACACAACCTGAACCCCTGTGCCATACTGCTTAC

70268 CACACTGGAGTGCAGTGGTGCAATCATGGTTCACTGTAGCCTGGAACTCCTAGGCTCAAG  
CAATCCTCCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTTGGTCCAATCCCCTC  
AGAGTGAGCAGGTTATCTCACTCCCTGGAAGGCTGGCTTCTCCCCTGCCTCTCTTCGGTG  
CTTGCTCCAGCAAGTTACTGAAGTCTCAGAGGCCTCTCCACCGTGAAATGGACACTGT  
CTGTCTGTGGGACTACAGGTGGATACCACCAGACCAGCTAATTTTTTAATTTTTTTTTTT  
[-, T]  
TTTTGGTAGAGACAGGGTCTCACTGTGTGCTCGTGTGGTCTGAAACTCCTGGCCTCAA  
GCAATCCTCCCACCTCAGCCTCCCAAAGTGCTGATATTACAGGTTTGAGGCACCATGCCC  
AGCTGAAGTAGGTTCAATCATCATCTCATTTTTATGGATGAGGAAATAAATCCCAAGAAG  
TTAAATAACTTGTCCAAGTCCAGACAGCCAATAAGTGATTAAACTTGGATTGAGCCCTG  
GGAAGCCAGACTCCAGAGCCACACAACCTGAACCCCTGTGCCATACTGCTTACTTGCATC

70941 AGAAGGAAACATGATTCAAGAAACTGGGCTGTCTGGCATGGTGCTATAGCACTCCACGTG  
GGGAATATTGTGTTTTCAAAGAAAGGGTGTGTTAGAAGGGGAATGATCATGGACGTTATA  
TCAGATAGACTTGGTCCCTCAACACCACTAAACCTAAGGCCCCCTCATATTAAAGGGA  
TCACAGTCTCATTAGGATGATTGTGGGGAGTGAGTGAACCTAGCAGAGTGCCTGGCATG  
TCACTGGCATCAGGAAATGCTATTTCTCTCTCCACCCGTCTTTCTCTCTCAAGCGAAC  
[G, A, T]  
GAGTAGACAAAGATAATTATACCTGGAGTACTTGCATTTCTTTGGCAGTAGAATAAAGTA  
AATTAAATGTATTTTTGAAGTTGAGGTTTCATGAACCTGATTGCGGGTCACTGTGTCC  
CAAGAAAGCCTTTATCTTTGACGTCCTCACATGCCGAATTGCTTATCTCCCTGTTCCCA  
GTGCAATTGTCTTAGAAGCTTCTATACTGACTAGTCTTGGAGAAAGCCATAAAACATTCC  
TCTTTTGTGATCCTCAAAGAATAAAATCGTGAGGAGCCTTCGCTGACTGACGGGGAAGTG

71359 TCCCAAGAAAGCCTTTATCTTTGACGTCCCTCACATGCCGAATTGCTTATCTCCCTGTTCC  
CCAGTGCAATTGTCTTAGAAGCTTCTATACTGACTAGTCTTGGAGAAAGCCATAAAACAT  
TCCTCTTTTGTGATCCTCAAAGAATAAAATCGTGAGGAGCCTTCGCTGACTGACGGGGAA  
GTGTAGAATGAATGCTTCGGTTTGCAGGGATGATCATTTGGCAGCAGTCTTTTTTTCAGGTT  
ATGAATTCTGATGTTTCCAGATGTTTGAAGATTTTGAAGTGTCTTCAGGGGAGCTCGAGT  
[G, T]  
GTCCCATGGCTGCCATTTCTTCTGGTCATAGCCTCGCTGAAGGGAATAGCATTTTCACGGG  
AGTGGGTTTAGGGTTGGATGAGGCACCCATCGGGAAGGACATGGGATTTTTTCATTCTAAG  
TGCCTTGCCATAAAGCAAACGACAGGGGTCTATTCCTCTCTCTCTGAGAAATGTTTCTGG  
GGGAGGTTGGTCTAATCCCCTCAGAGTGAGCAGGTTATCTCACTCCCTGGTAGGCTGCC  
TTCTTCCTTGGCTCACTTCAGTCTTGCCTCCAGCAAGAGGGGTCTCTCCAATGCAAAAT

72550 TGAGTATTATTTGGCAAGATTTATTATTTTTTCATTAAAAAATTAAAAATGACCTATAAT  
AATTGTATGTATTTATGAGGTACCTCGTGATGTTTCCATACCTACAATGTATGATGATCA  
GATCCGGGAAATTAGCATATTTCATCATCTCAAACATTTATCATTTCTTTGTGTGGGAAC  
GTTCAATATCCTCCTTTTAGCTATTTGAACTATATACTAGATTATTGTTAACTGTAGTC  
CATCCTGCAGTGGTATAGAACACTAGAAATTTATTCCTGTTATCTTGCTGTAATTATGTCC  
[C, T]  
GTTTAACAAATCCTTCCCTATCCTCTGCTCCCCTGACTCTTTCCAGTCAGCATTATTTAT  
TAGGCACTGATTCTGTGCTGGCTGGGTGCTAGAGAGTTTACATATATTACTTAGCTTCAT  
TTGCCCTCTCTCCATTGCACCAAGAGGCGGCCACTGTTGCTGCCCCATTTTACAGAGGGTA  
AAGTTCTTGCATCTAGCTAGTGACCAAAGCAGGACTTGAGTCTAGCTAGATCTCTCTGAC  
TCCAGAGGCCACGCTCTCTTAATCGTACTCTCCTTGGCTTGACACGGTGGGCTTAGAGAG

75313 AGCCTCCTGAGAAGCTGGGACTACAGGGGTGTGCCACCACACCCAGCTAAGACAAAAACT  
CACCTTGTGTCTTCTTTATGCATGAGCAGATTCCCTTGGTATCTATAGCCGTCGAAGCT  
TTACGTATTTCCCTATTTAGGGACATAAGAATTTTAGGAAAGCAGCGTGTGGAAAGCA

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CGGCACCTGAGATGTTTCATGGAAATCCTTGTGTGACTTCAGAGTGCAGATCTAGAGCAG  
CCCTCTGTTTGTCTGCCCTGGGCCATCCCCTATTTCAAGCAGTCTTTAGTCCAGGAAGTT  
[T, A]

AGGTAGCAGCTCAGGCAGCAGGTGAGCTCTGGAGAGTGCAGGTTCTGGGTCTTTGAGCCC  
AGGGGCACAACCTCTGAGTTGAAGTGACTCCTCCTGGCTGTTGCTTTGAATTTAGAAGAGC  
TGCCCTTTTACCAGCAAGGCAGTCACGCAAAAGATGCTTCAATGTGTGCAAGATCAGGCC  
TGCAGCCCCCAGCCTGTGTCTACAGGCCTCCGAGTCATTATTATTACGGTTTCTATCCCT  
GGGGTTATTGATTTCACTACTGTTTAGTGAAGGAGATCTAAAGCTTTTAAGCCAGAAAT

75541 GATCTAGAGCAGCCCTCTGTTTGTCTGCCCTGGGCCATCCCCTATTTCAAGCAGTCTTTA  
GTCCAGGAAGTTTAGGTAGCAGCTCAGGCAGCAGGTGAGCTCTGGAGAGTGCAGGTTCCGG  
GTTCTTTGAGCCCAGGGGCACAACCTGAGTTGAAGTGACTCCTCCTGGCTGTTGCTTTG  
AATTTAGAAGAGCTGCCCTTTTACCAGCAAGGCAGTCACGCAAAAGATGCTTCAATGTGT  
GCAAGATCAGGCCTGCAGCCCCCAGCCTGTGTCTACAGGCCTCCGAGTCATTATTATTAC  
[G, T]

GTTTCTATCCCTGGGGTTATTGATTTCACTACTGTTTAGTGAAGGAGATCTAAAGCTTTT  
AAGCCAGAAATTAAGAGGTAATGGAAATTGGCATGCCACTGGAAAATGAATTGCAAAAT  
GAGAATTCATGTTCTAAAAAACTCCCATAAAAATAAAACCAAAACCCAGAGTGAATG  
CTCCTGTGACTGCATTTTTTTCCAAATGTGCATGGGTTTGTTCCTTTAGAGTGTGGCT  
GTATACATTATGGAATAATGAGATTTTGATGGTGTCTCGTTCCTACAATTGCTCTTATTA

75957 CAAATGAGAATTCATGTTCTAAAAAACTCCCATAAAAATAAAACCAAAACCCAGAGT  
GAATGCTCCTGTGACTGCATTTTTTTCCAAATGTGCATGGGTTTGTTCCTTTAGAGTG  
TGGCTGTATACATTATGAATAATGAGATTTTGATGGTGTCTCGTTCCTACAATTGCTCT  
TATTACTTATCACAATACAATGTATTCAATTTATATAACTAATATTTACTTAGTACCTATA  
ATGAAGCAGGTGCTATGTTTGGCTCTAGCGATTAAAAACAATAAAAAATGCAAGATGCC  
[T, G]

CCACCCTGTCTCAGGGAGCTTGAGGTTTCAGTATTAATTATATCGCTAGCCAATTCTGGC  
ATGGTGCTTACTGTGGACAGGAAGTCTCTAAATGCTTCACGTGTAGTAACCTCATTTAAA  
TTTTACATTGATCCTATGAAGTGGGGTAAGCAACAGAGGAACAGAGAAGTTAAATAACTT  
GCCCCAAGCTGAAGTGAGAGGTGGAACGTGATCCGGCCAAGGCAGTCCGGCTCTAGAATC  
CATGGTTTTTAGCCATGATGCTCTACTCTAGTGGATAGTTACAGCCCAGTAGCTATTGGT

76415 GGAACAGAGAAGTTAAATAACTTGCCCAAGCTGAAGTGAGAGGTGGAAGTGTGATCCGGC  
CAAGGCAGTCCGGCTCTAGAATCCATGGTTTTTTAGCCATGATGCTCTACTCTAGTGGATA  
GTTACAGCCCAGTAGCTATTGGTTACTAGATTGGTTCTAGAAGACAAGGAAGCACTCAGG  
TCCTTAGTACAGAGCAGGAGTCTCTGACTCAACCTATGGGACCCCAAGAGGACCTTCA  
TTCACCTGTGAGTCAACTGCAGAGAGTCGTGATTACCTCCTGGTTGTCTTTAGAGTGGC  
[A, C]

GGGCTTTGTGTCTTAACATAAGGTGTTGAAGCTGGGTCAACCTTTTCGATCTAAAACCA  
TGTCCATGGGTTATCATTCAGGTCTGCAATTAAGAGTAGCTTGTCACTTTATATTGGGAA  
CATTTATTTTTCTTCTCTATGGAAATGGGCAGAAAGAGATGAAAAGCCTGCTGGTG  
CAGCTTAACCTTCTCAGTAAGTGAGTGTTTAACCTTTTGTTTTTTTAAAAATGGAGATG  
AGACATACAAATTATGACTTCTCTATGTTGTCCTTTTTTTTAGTTGGAAGAAGGTGACAT

77872 TCTGTAGCTGCTTTTGTAGTCCAGTACAGTTTTTTAAAAATAGAAATTGGATAGACCCA  
TTTTTAATGGGAATGATCTCAAGTGACAGAGAGCAAGGCATATATCAGACACTTCCTC  
AGGACCAGGGCAATTTTTCAACATCAGTTGGCAAATTTGTTATTCTGCCTGTAGAGTGTA  
AGTCCAAACTGAGATGAAAGAGTGACAGCTTGTTAGTCTGAAAGTTTATTGATCATATCA  
AAGTATACACATCTATCCCTGATTCCCTAGTGGACTTGATACTTTCCTCGTGGTTAAAA  
[T, A]

TTGTCTTATTTTCATCCTTCCATGTAGTCAAAGAGAGACAGAGGAAATGCATTTTCCATCA  
TAAGGCACAATTTGGAAGCTACAAGAGTGCCCCCAAAATATGGCCTGGTCTCATAAGATAA  
TATTTAGATAGATTAGTCGTTAGTGAATACCCAAGGGGCTAATGAATTGAGTCTCAGAAA  
TCCCCATTGTAAGGGATTAACTTGTAGTAGCAAGGAAAGCTAGCGTGTCTAAGACCATAC  
GCCATGAGCAAGCATGCTAGCCCATCTGGGTTTCTCTCTCTCTCTCCAAACAGATTC

78058 AACTGAGATGAAAGAGTGACAGCTTGTTAGTCTGAAAGTTTATTGATCATATCAAAGTAT  
ACACATCTATCCCTGATTCCTTAGTGGACTTGATACTTTCCTCGTGGTTTAAAAATTTGTC  
TATTTCATCCTTCCATGTAGTCAAAGAGAGACAGAGGAAATGCATTTTCCATCATAAGG  
CACAATTTGGAAGCTACAAGAGTGCCCCCAAAATATGGCCTGGTCTCATAAGATAATATTT  
AGATAGATTAGTCGTTAGTGAATACCCAAGGGGCTAATGAATTGAGTCTCAGAAATCCCC  
[A, C]

[illegible]

CATATGTGGCCCCACCAGGGCTAAAATATTTACTATCTGACCCTTTATGGAAAAAGTTGTT  
GATCCCTGGTTCAGAGTGTTTGAAATAACTCAGATGAAAGAAGGCAAAATGTAATGATGA  
TTGACTTTTCCAGTTGTAATCTGATTTGTGACAACCACTGTATGCCTGTTTTAACAAAGC  
TTAATGGGCATTACTTAGGATAAATGTAATTACGTTTCAATATTTGTGTCTTGCTCTCCC  
TACATAGGGTTATTCCAGGTTTGCCCAAGGAACAGAGAGTCTGTTTGTGTTCTAGAAGT  
[C,T,A]  
GCTCCTGTGTCTGTACCTCCTCTCCAAGGCTTCCACCTGTGCGTTTTTTATCCCAGTTC  
ACCCGTGTGAACAGCATGTGTTTCGGCTGCCATGACAGCAGTCCTACCTTTTTCCCTGG  
CTTGAAAGAAGATGCGAGGGGCCAGCTCAGGAAGAAGTGTACGGAGTTTTTTCACCTTC

TCCTGCTCGTGATGAGGCTAGGGAGGGATTTTTAGCGTATCTTTAATTGTTGCCGAAGTA  
TGAAC TCGGGGAAGGGGCAACTGTGAAGCAGTGATGCATAGACTAAGTCTCCTGGAAGA

84687 GGGTGTACTTGGACCATCTCATTTAATCCTCACAACAACCCTGTGGGGAAGGTATTATC  
TCTAGTTTGCAAATGAGGAAACTAGGCTCAGAGAGGTTCAAACAACCTTGCCCAAGGTTCT  
GAAGTTAATAACGGCCACAGCCAGGATGGCTCTTAACCTCTGCCCTGTGGAAACAAGCTC  
AACGTAAACATTCTTACAAGACAGAAAAGAGTGAAAAAGCAACCAAAATCCTGCCTTGC  
GGAAATGCCCACTTTGGGTGAACATTCTTCTAGACATTTTTTGTGTGTATATGCACAG  
[A, C]  
AACTTGTAACATTTTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTATAAATGTC  
ACCATATCTATATCCTAGCGTTTCCCCCTATTAAACACTAATTTCTGATTTTCACAA  
CTGGGTGCATAGTATTTTGCTTTGGGATGCTACCATCATCCACTTAACCAGTTCTCTCTA  
GATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTTTGAAGAA  
AAAAAAATAACAACCTTTTAACTGAGTCTTATGCTTTTTCCCTTTCTTTGCAGCATGC

84761 GAGGAAACTAGGCTCAGAGAGGTTCAAACAACCTTGCCCAAGGTTCTGAAGTTAATAACGG  
CCACAGCCAGGATGGCTCTTAACCTCTGCCCTGTGGAAACAAGCTCAACGTAAACATTCT  
TTACAAGACAGAAAAGAGTGAAAAAGCAACCAAAATCCTGCCTTGCGGAAATGCCCACTT  
TGGGTGAACATTCTTCTAGACATTTTTTGTGTGTGTATATGCACAGAACTTTGAACATT  
TTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTATAAATGTCACCATATTTCTATA  
[C, T]  
CCTAGCGTTTCCCCCTATTAAACACTAATTTTCTGATTTTCACAACCTGGGTGCATAGTA  
TTTTTGCTTTGGGATGCTACCATCATCCACTTAACCAGTTCTCTCTAGATCACTGCAGGTT  
CTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTTTGAAGAAAAAAAAAATAAACA  
ACTTTTAACTGAGTCTTATGCTTTTTCCCTTTCTTTGCAGCATGCTCTTGATGCTGACA  
ATGCGGGAGTCAGTCCAATAGGAACTCTTCCAACAACAGCAGCCACTGGGACCTCGGCA

84911 CAAAATCCTGCCTTGCGGAAATGCCCACTTTGGGTGAACATTCTTCTAGACATTTTTTGT  
GTGTGTATATGCACAGAACTTGTAACATTTTGCATAATCTGGGCCACCCCATGCCTGCA  
AGCTTTCTATAAATGTCACCATATTTCTATATCCTAGCGTTTCCCCCTATTAAACTAA  
TTTTCTGATTTTCACAACCTGGGTGCATAGTATTTTGTCTTTGGGATGCTACCATCATCCAC  
TTAACCAGTTCTCTCTAGATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACC  
[-, T]  
TTTTTTTTTTGAAGAAAAAAAAAATAAACAACCTTTTAACTGAGTCTTATGCTTTTTCCC  
TTTCTTTGCAGCATGCTCTTGATGCTGACAATGCGGGAGTCAGTCCAATAGGAACTCTT  
CCAACAACAGCAGCCACTGGGACCTCGGCAGTGCCTTTTTCTTTGCTGGAACGTGCATTA  
CGACCATAGGTACCCGTTTGTTTGCTAATATCTCTTCTCTGCAGGTCATCTTGAGTAAG  
GGCGCTTAGTCAGTGTTTTTGTCTCATAGCATACACTATAGTTTGAGGTTTACAGAGAGGC

84921 CCTTGCGGAAATGCCCACTTTGGGTGAACATTCTTCTAGACATTTTTTGTGTGTGTATAT  
GCACAGAACTTGTAACATTTTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTAT  
AAATGTCACCATATTTCTATATCCTAGCGTTTCCCCCTATTAAACTAATTTTCTGATT  
TTCACAACCTGGGTGCATAGTATTTTGTCTTTGGGATGCTACCATCATCCACTTAACCAGTT  
CTCTCTAGATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTT  
[-, T]  
GAAGAAAAAAAAAATAAACAACCTTTTAACTGAGTCTTATGCTTTTTCCCTTTCTTTGCA  
GCATGCTCTTGATGCTGACAATGCGGGAGTCAGTCCAATAGGAACTCTTCCAACAACAG  
CAGCCACTGGGACCTCGGCAGTGCCTTTTTCTTTGCTGGAACGTGCATTACGACCATAGG  
TACCCGTTTGTGCTAATATCTCTTCTCTGCAGGTCATCTTGAGTAAGGGCGCTTAGT  
CAGTGTTTTTGTCTCATAGCATACACTATAGTTTGAGGTTTACAGAGAGGCTTACGAAACA

85786 ACCTTTTCTTACCTTCCCAGAGACTGTTGCTTTTCATCTGTTTTGATTGTTGATTTTAACA  
CTCATCCCCATGCTTTTAAATATCATGCTTGTGCTACTTCTGGAATTTTCAGTTTTGGGG  
ATTTTTTTTTGACTTTCCATTGTGGAAGATGAGGAGTTAGTTCTTTCTTCTGCTGCCTC  
ATCACAGAAGGGCTTTTTCTGTCTCTGTCTTCCCAATATTTAATTAGATAGAAGTG  
AAACATCTGCATGATTTTGACTAGATAAATGCTTTCTGCAGCTGATCATAGAGTGAACAG  
[C, T]  
GATGACCTCTTTCTGTATCAGTCTTTGTCTTATTTTTTGTATGTGTGTCTTTTTTTTCT  
GACACTTGGTGAGTTTTGTATTTTGTCTTAGGGTTAACTTTATTTATTTATTTATTTT  
ATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTT  
CCCAGGCTGGAGTGAGTGGTGAATCTCGGCTCACTGCAACCTCCGCCTCACGGGTTCA  
AGTGATTCTCTTGCTCATTTCTCTGAGTAGCTGGGATTACAGGCGCCACCACCATGCC



CACCCAGGCTGGAGTGCAGTGGTGAATCTCGGCTCACTGCAACCTCCGCCTCAGGGTT  
CAAGTGATTCTCTTGCCCTATTCTCCTGAGTAGCTGGGATTACAGGCGCCACCACCATG  
[C, A]  
CTAGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCACCACATTGGCCAGGCTGGTCT  
CAAACCTCCTGACCTCAGGTGATCTGCCCCCTCAGCCTCCCAAAGTGTTGGGATTACCGG  
CGTGAGCCACCGCACCTGGCCTAGGGGTTAACTTTATAAGTATAATGGCATATAATAATT  
TTAGTGTCTATTTCGTTAACCAGCATGTATTGATCCCTATAACGGGTGATGATATCTCT  
TTTCTCTCTTTTTCCAACACAAAGTTTGGTGGACATCATCTTTTAAATGATTAAATTTG

86585 CCAGCATGTATTCGATCCCTATAACGGGTGATGATATCTCTTTTCTCTCTTTTCCAACA  
CAAAGTTTGGTGGACATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATG  
ATTTGCCAGCTTTAAATGATAACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTG  
AACTTAGCATCTCAATTTCCCTTTCCCTCTTCCACTATCCACTCTTATTGATGGTGTCTT  
CTATATAAGTTGTATCTCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAG  
[T, -]  
TTTTTTTTTTTTTAACTAATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGT  
GCCATTTTCCAACGTCGTGTGCTCCACTCTGTGTCTCTGCCACATTTTGGTAATTTTCA  
CAATAGTTTCAACCTTTTTCATTTTGTATTATCTGTTAAGGAGATCTGTGGTCAGTGA  
TCTTTGATGTCATGATTGTCTATTGTTTGGGGTGGCACAACCATGCCCTTTGAAGATGG  
TGAACCTAATCAATAAATGCCGTGTGTTCTGACTGTTCCACCAGCTGGCCATTCAGGCAT

86596 TCGATCCCTATAACGGGTGATGATATCTCTTTTCTCTCTTTTCCAACACAAAGTTTGG  
TGGACATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATGATTTGCCAGCT  
TTAAATGATAACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTGAACCTTAGCATC  
TCAATTTCCCTTTCCCTCTTCCACTATCCACTCTTATTGATGGTGTCTTATATAAGTT  
GTATCTCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAGTTTTTTTTTTT  
[T, -]  
AAACTAATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGTGCCATTTTTC  
AACGTCGTGTGCTCCACTCTGTGTCTCTGCCACATTTTGGTAATTTTCAATAGTTTCA  
ACCTTTTTTCATTTTGTATTATCTGTTAAGGAGATCTGTGGTCAGTGATCTTTGATGTC  
ATGATTGTCTATTGTTTGGGGTGGCACAACCATGCCCTTTGAAGATGGTGAACCTAATC  
AATAAATGCCGTGTGTTCTGACTGTTCCACCAGCTGGCCATTCAGGCATCCAGATCCCT

86601 CCCTATAACGGGTGATGATATCTCTTTTCTCTCTTTTCCAACACAAAGTTTGGTGGAC  
ATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATGATTTGCCAGCTTTAAA  
TGATAACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTGAACCTTAGCATCTCAAT  
TTCCTTTCCCTCTTCCACTATCCACTCTTATTGATGGTGTCTTATATAAGTTGTATC  
TCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAGTTTTTTTTTTTAAAC  
[T, A]  
AATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGTGCCATTTTCCAACGT  
CGTGTGCTCCACTCTGTGTCTCTGCCACATTTTGGTAATTTTCAATAGTTTCAACCTT  
TTTCATTTTGTATTATCTGTTAAGGAGATCTGTGGTCAGTGATCTTTGATGTCATGAT  
TGTCATTGTTTGGGGTGGCACAACCATGCCCTTTGAAGATGGTGAACCTAATCAATAA  
ATGCCGTGTGTTCTGACTGTTCCACCAGCTGGCCATTCAGGCATCCAGATCCCTGAGGC

89478 GTATGCCCTGTATAACCTCAGGGTATGTAATTTAGATTTTAAATTTGTTACCCTGATATTG  
CATTTGTTTTAGTCGTAGCTCTATAGTTAGATATCATTAATGTTTCATCTCTAGTCCTTTT  
GCTGTGGTTTATCTCATGATCACTTACTTGGCTGAAAGTCATCTTCAAGTAGTTGCCTTA  
AGAATGGCTCAGGGGAGCAATATTCTGTGAGATCTTGCAATTGTTACAGTTGTAGCTTAA  
CATTTGAAGGATAGTTGAAACAAAATGAAATCCATTTTATTGACTCACATTTTCTTTTTC  
[-, T]  
TTTTTTTTTTTGGAGTGGGTCTGTCTGTGTTGTCAGGCTGGAGTACAGTGGTATGAACA  
TAGCTCACTGCAGTCTCCAACCTCCTGGGCCAAGTGATCTTTTGGCTTCAGCCTCCTGAG  
TAGCTGGGACTACAGGCGCATACCACAGGGCTAGCTAATTTTTTAAATATTTTGTAGAA  
GCCAGGTCTGTGTGTTGCCAGACTGGTCTCAGACTCCTGGCCTCAAAGGATCCTCCT  
ACCTTGGCCTCCAGAGTGCTAGGATTACATGTGTGAGCCACCACGCTGGCTTTACATT

89488 ATAACCTCAGGGTATGTAATTTAGATTTTAAATTTGTTACCCTGATATTGCAATTTGTTTT  
AGTCGTAGCTCTATAGTTAGATATCATTAATGTTTCATCTCTAGTCCTTTTGTGTGGTTT  
ATCTCATGATCACTTACTTGGCTGAAAGTCATCTTCAAGTAGTTGCCTTAAGAATGGCTC  
AGGGGAGCAATATTCTGTGAGATCTTGCAATTGTTACAGTTGTAGCTTAAACATTTGAAGG  
ATAGTTGAAACAAAATGAAATCCATTTTATTGACTCACATTTTCTTTTCTTTTTTTTTT  
[-, T]

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GAGACTGGGTCTTGTCTGTGTTGCCAGGCTGGAGTACAGTGGTATGAACATAGCTCACTG  
CAGTCTCCAACCTCTGGGCCCAAGTGATCTTTTGGCTTCAGCCTCCTGAGTAGCTGGGAC  
TACAGGCGCATACCACCAGGGCTAGCTAATTTTAAAATATTTTGTAGAAGCCAGGTCTT  
GCTGTGTTGCCAGACTGGTCTCAGACTCCTGGCCTCAAAGGATCCTCTACCTTGGCCT  
CCCAGAGTGCTAGGATTACATGTGTGAGCCACCACGCTGGCTTTACATTTTCTTTTAA

91631 TTGCTTTTGTTTTAAAGATCTAGCCTTCAGGACCTATGTTGTTTCTAGGTGAAATCCAGAA  
AGTCATATGCAACAAGAACATTTTGGATGAAGGAAAATTGCCATTGTTATTTAGAAACAC  
TCTTAATCTAATTATATGACATGCTAGGTTTACACTTGCAAATCTGCAAATATATTGGTG  
TTAGCTATTAAAAGTATTCAAGATGCCCATGACACCAGTGGGTCTGGGGCTTAGAAGCCT  
TTTCTGGCACTCTAGGCCAGGTTAGGTGAGCTTAATCCACAGACTCACAGCGTCCAACAA  
[A, G]  
GGAAGCTGGGTGGCTGACACCATTAGTATACGGGCAAAAAGTGTTAGCAACCTGAACA  
ACACCAGAGGGCGTTGCTGTAGTGGATCCAAGAAGACCAATGTCAGGTTTCATTGTGTTC  
AGCAGATTGTTAACCTGGGAAAAAGTGTCACGCATTGTAGGAGGATCTATTGTACACCAA  
TTAAAATTGAGAAAGTCTGGGCCACTTCAAGAAGTACATTTTGGAAAATGCTCTCTGATA  
CCCGGTATTGGATTATGAGACATTAGTGTGTATATTGAAGGAACTCCTAATTTTCTTG

91898 CAGCTTAATCCACAGACTCACAGCGTCCAACAAAGGAAGCTGGGTGGCCTGACACCATT  
AGTATACGGGCAAAAAGTGTTAGCAACCTGAACAACACCAGAGGGCGTTGCTGTAGTGA  
TCCAAGAAGACCAATGTCAGGTTTTCATTGTGTTTACAGCAGATTGTTAACCTGGGAAAAAGT  
GTCACGCATTGTAGGAGGATCTATTGTACACCAATAAAATTGAGAAAGTCTGGGCCACT  
TCAAGAAGTACATTTTGGAAAATGCTCTCTGATACCCGGTATTGGATTATGAGACATTA  
[G, C]  
TGTGTATATTGAAGGAACTCCTAATTTTCTGTTTCATGACATGGCTAAATGAATGATC  
TGTCTGCTGCATTGAAAAACACTATGGCTACATTGGAAGTGCAATTAATGGTATTTATTG  
TGTTAGCTTGTTAGGAATCCAGGAACCTGGTTTATGAACAACACTATGTTTATTGATCCAC  
ATAATATTATGTGACTGAGGAATGGTGGCTCCATCTGCCTAATGAAGAACGTTTGATATG  
CGATGGTTTTTGCCCTTTTTTGTGTGTGTGCTTACACCGGAATCTTTGAGTTTGAGCAA

93506 AATTTTAACTCCAGAGTGGAGGATCTTTATAGAGTCATACAGTTAGAGAATTCCAAAGAA  
GCCCTTAATACAATGTAAGTAAGAATAATGAGGTGCAGAAATAATGTTTTTCCAGTTAC  
TTAGTGGTAAATTCATTGTTGTCATGTGGTTCGCAAGGTTTATAAGAAAACTCAGAGCCCA  
GCAATTCCTCCAGTTCTTCTGAGCAATTTTCCACTAGTTAGGAGTCAGGAAAGAGGAAC  
CGTGAGAGCTGAGGAGCTGTGTATTTTCTTAATTTGTGAAATACACAAATATTGGCCTGTT  
[T, C]  
CCTTGCGATCATAAAATTTGCAACGTAATATTGCAGACATTTTTGCATATTACTAAAAGTT  
CTTTGAAAAGTGATTTCTTTGATGGTTTCTATTGGATCCACTATTCACACTATAATCACA  
TATTCCTGGGAACCTAAGCTGTTTCTATTTTAGTAATAGTGTAACCATGGTGTTAACG  
TTGTGAAGTGTGGTCTTCATCTCTGGTTGTTGCCTTGGAAGGTTACCAAGGTTTGCTC  
TGTCAAAGGAAATGAAAGGCTTGCCAAATTTCTTTCCAGAAAGGCTCTCATGAGCAGCTT

94409 GTCCCTTTCTCAGTAACTAATTCAACGTGAGAAAGTCCCACCTGCCTTTGATTATTGGCT  
CAGCTGGTGGGTCCCCGTAAGTCTTTTCTAAGCTGGATGAATGATGCTCACTTCTAT  
GTGCAGATGCTTTTTACAAGCTGTCTATTGTAGAAGGACAGCGAGCGATCAGGTTCTTA  
CCAATATCTGTGAAATGCGATTAGATTTTAGTCTGTGAGGCATTTTCAGATTGAGCCACC  
TGACTCTGCCACATCAGAGAGAGAGCCTCTGGTCAGGACCAGGTGGTAGCCAGTCACTG  
[T, C]  
GTCCTAGCCTGGCAGCCTCATTTAAGGGTTGTCCCTATCAAACATTCGAGGCACCTGTT  
GGTACTTACCAGCACTGGATTGGATGTTATTTTTTATTTTTATTTTTATTTTATTCA  
GAGAAGGGGTATTGCTTTGTTGCCTGGGCTGGAGTGCAGTGGTGTGATCATAGCTTACTG  
TAACCTCAAACCTCTAGCTCAAATGGTCCTCGCGCTCAGCCAACCAAGTAGCTGGAAC  
ATAGTTGTGACCACCATGCCGGGCTAATTAATAAATTTTTTTTTTTTGTAGAGACAAGGG

94689 CAGGTGGTAGCCAGTCACTGTGTCACTAGCCTGGCAGCCTCATTTAAGGGTTGTCCCTAT  
CAAACATCGAGGCACCTGTTGGTACTTACCCAGCACTGGATTGGATGTTATTTTTTAT  
TTTTATTTTTATTTTTATTAGAGAAGGGGTATTGCTTTGTTGCCTGGGCTGGAGTGCAG  
TGGTGTGATCATAGCTTACTGTAACCTCAAACCTCTAGCTCAAATGGTCCTCGCGCTCA  
GCCAACCAAGTAGCTGGAATATAGTTGTGACCACCATGCCGGGCTAATTAATAAATTT  
[T, A]  
TTTTTTTGTAGAGACAAGGGCTCACAATATTGTTTCAAGGCTGGTCTCAAATTCCTGGCCTC  
AAGTGATCCTCCACCTTGGCCTCCCAAAGTGCTGAGATTATGAGTGTGAGCCCCACTTG  
ATTTAGATGGGATGTTTAACTGTGCCTTTGAAAAGAGCAATCACCGTGGCTAACATTTA

FIGURE 3, page 87 of 107

CTGAGTTCTTACTAGTTAACGTGCATTGTGCTCCACATACATTATCTCATTTAATCCTGC  
ATAACCACATGAGGTGGGTACTGTTATTAGCCTCATTTTATCTATGAGAAGACTGAGGCC

94856 GGCTGGAGTGCAGTGGTGTGATCATAGCTTACTGTAACCTCAAACCTCCTAGCTCAAATGG  
TCCTCGCGCCTCAGCCAACCAAGTAGCTGGAACATAGTTGTGCACCACCATGCCGGGCT  
AATTAAAAATTTTTTTTTTTGTAGAGACAAGGGCTCACAAATATTGTTTCAGGCTGGTCTC  
AAATTCCTGGCCTCAAGTGATCCTCCCACCTTGGCCTCCCCAAGTGCTGAGATTATGAGT  
GTGAGCCCCACTTGATTAGATGGGATGTTTAACCTGTGCCTTTGAAAAGAGCAATCACC  
[G, A]  
TGGCTAACATTTACTGAGTTCTTACTAGTTAACGTGCATTGTGCTCCACATACATTATCT  
CATTTAATCCTGCATAACCACATGAGGTGGGTACTGTTATTAGCCTCATTTTATCTATGA  
GAAGACTGAGGCCAGAGAAGTTAAATAACTTGCCCGGTATTTTCATAGTTAGTAAGCAGT  
GGAGTCCAGCTAGATTACACAGGACCAGCTACATAATTTGTGGCACCAGTACAAATTGA  
AGTGGGTCCCTTAGAGCATTAACCAAGCACAGGACCCATCTAAGCGTGGGCCCTGTGG

95303 TAACTTGCCCGGTATTTTCATAGTTAGTAAGCAGTGGAGTCCAGCTAGATTACACAGGACC  
AGCTACATAAATTTGTGGCACCAGTACAAATTGAAGTGGGGTCCCTTAGAGCATTAACCC  
AAGCACAGGACCCATCTAAGCGTGGGCCCTGTGGGACTGCACAGGGTGCACATCCATAAA  
GCAGCCCTGCCTGCGCAGACAGACTGGTGACCATAATAAGAAAGCACACTCTCAACTAAA  
CAAGTAGGGCTGCACAACACACAGTTGGGCCAAGATTTGACTTTGGCACGTAAACAGCAA  
[A, G]  
TGGAAGCCTTTGTGTGCACTCCTCAGGCACAAGTCTCTTTAAATGCCAGCTTTCTCTTC  
CTGAAAAACGGGGAACCTTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATCCTGGTGC  
TGTGCGTTTATTACAGCTCCCTTGGCTGTTTGCCTTGTGGAGTTGGTTGTCTTCTGTC  
TGAAAGTCAACACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTGGAGGGAA  
GATAGGAATCAACCGCTGTTTCTCCTGGGACTGAGTTTCTTGAGACATATTGCTCA

95373 TTTGTGGCACCAGTACAAATTGAAGTGGGGTCCCTTAGAGCATTAACCAAGCACAGGA  
CCCATCTAAGCGTGGGCCCTGTGGGACTGCACAGGGTGCACATCCATAAAGCAGCCCTGC  
CTGCGCAGACAGACTGGTGACCATAATAAGAAAGCACACTCTCAACTAAACAAGTAGGGC  
TGCACAACACACAGTTGGGCCAAGATTTGACTTTGGCACGTAAACAGCAAATGGAAGCCT  
TTGTGTGCACTCCTCAGGCACAAGTCTCTTTAAATGCCAGCTTTCTCTTCTGAAAAAC  
[G, A]  
GGGAACCTCTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATCCTGGTGTGTGCGTTCA  
TTACAGCCTCCCTTGGCTGTTTGGCCCTTGTGGAGTTGGTTGTCTTCTGCTGAAAGTCAC  
CACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTGGAGGGAAGATAGGAATC  
AACCGCCTGTTTCTCCTGGGACTGAGTTTCTGGAGACATATTGCTCAGAAACAATTC  
CTTCCACAGTAAAGCACAAAGGCAACGGGGTGCCTTAGTTTGCATCATATTTACAGGTA

95657 TCTCTTCCTGAAAAACGGGGAACCTCTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATC  
CTGGTGTGTGCGTTTATTACAGCCTCCCTTGGCTGTTTGGCCCTTGTGGAGTTGGTTGT  
CTTCTGCTGAAAGTCACACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTG  
GAGGGAAGATAGGAATCAACCGCCTGTTTCTCCTGGGACTGAGTTTCTGAGACATA  
TTGCTCAGAAACAATTCCTTCCACAGTAAAGCACAAAGGCAACGGGGTGCCTTAGTTTGC  
[A, T]  
TCATATTTACAGGTATTTAATCTTCACATGTAACCTCTTGCTTTGCATGTAACCTCATTTA  
ATCTTTAATAGCTATGGGTAGGCACCTTAATAGCCTTGCTTTTGTGAAGAAAGTGAGG  
GAGAGAGATTAGAATGTGCCATGACCTGAGAGTTGGTAAATAGAAGAATCAGAACAGA  
AATCTGTGTAGTCTCTAGTTCTAGAGCCTACAGACAAGTGTACACCTTACTTCAAAGTT  
CTACCAAGCATTTCTAGAAGGATGAGCAGGGCAGTCAGAGAGGCGGGGTGTAACCTAGATC

96312 AAGTGCTGGAATTTTCCAGAGTGACAGTGTGAGGGTCAAACAGTCTCTCCTTATAGTT  
CACCAAAGGCATGGAGCACAAATACACTCACACACACGCCCATGCATGAGATACAGCATC  
ACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTG  
AATATATTTAAAGGCTTGTGTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGC  
TTTAATATTATTTTGTGTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTG  
[-, A]  
TAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCC  
CCCTGCATTTTCTTGGTACCTCTGACACTAGGATTGAGATGTTAAGTGGGTCTAAG  
GAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCT  
GATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTCTG  
AAAGCTGGAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGT

96315 TGCTGGAATTTTCCAGAGTGACAGTGGTTGAGGGTCAAACAGTCTCTCCTTATAGTTCAC  
CAAAGGCATGGAGCACAAATACACTCACACACACGCCCATGCATGAGATACAGCATCACT  
CAAGAAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAGAAAGAAAGATGGCTGTGAAT  
ATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTT  
AATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATA  
[- , A]  
TAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTCCTTGA  
TGCATTTTCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAG  
AACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGAT  
GCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTCTGAAA  
GCTGGAGGAAGGGGGTGTAGCACTTGTTCAGGATTAATGAGATGCCTGTTTCATCCAGTTCC

96329 CAGAGTGACAGTGGTTGAGGGTCAAACAGTCTCTCCTTATAGTTCACCAAAGGCATGGAGC  
ACAAATACACTCACACACACGCCCATGCATGAGATACAGCATCACTCAAGAATGATGACT  
TTCTGTCCACTGGGCAGTGTGTACCAGAAAGAAAGATGGCTGTGAATATATTTAAAGGCTT  
GTTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATATTATTTTGT  
GTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAATAATAATAAT  
[- , T, A]  
CTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGCATTTTCCTTGA  
GTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAACTAGGTAGTGTG  
AGGTGGAAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTCCATGGTAAGC  
CACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTCTGAAAGCTGGAGGAAGGGG  
GTGTAGCACTTGTTCAGGATTAATGAGATGCCTGTTTCATCCAGTTCCAAGCCTCCACTTGT

96370 TTCACCAAAGGCATGGAGCACAAATACACTCACACACACGCCCATGCATGAGATACAGCA  
TCACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAGAAAGAAAGATGGCTG  
TGAATATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTA  
GCTTTAATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTG  
TGATAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTT  
[C, T]  
CCCCCTGCATTTTCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTA  
AGGAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCC  
CTGATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTC  
TGAAAGCTGGAGGAAGGGGGTGTAGCACTTGTTCAGGATTAATGAGATGCCTGTTTCATCCA  
GTTCCAAGCCTCCACTTGTGTTGCTATGCTGCAATATATTTCTTTCTGAGACACTTGGA

96372 CACCAAAGGCATGGAGCACAAATACACTCACACACACGCCCATGCATGAGATACAGCATC  
ACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAGAAAGAAAGATGGCTGTG  
AATATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGC  
TTTAATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTG  
ATAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCC  
[C, T]  
CCCTGCATTTTCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAG  
GAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCT  
GATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTCTG  
AAAGCTGGAGGAAGGGGGTGTAGCACTTGTTCAGGATTAATGAGATGCCTGTTTCATCCAGT  
TCCAAGCCTCCACTTGTGTTGCTATGCTGCAATATATTTCTTTCTGAGACACTTGGA

96439 AATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAGAAAGAAAGATGGCTGTGAATATAT  
TTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATA  
TTATTTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAA  
TAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGC  
ATTTTCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAAC  
[T, C]  
AGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTC  
CATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTCTGAAAGCTG  
GAGGAAGGGGGTGTAGCACTTGTTCAGGATTAATGAGATGCCTGTTTCATCCAGTTCCAAGC  
CTCCACTTGTGTTGCTATGCTGCAATATATTTCTTTCTGAGACACTTGGAACCTATA  
TTCCCCAAAGTTAGGCTATTGTGAGACAGTCAAGCTGGGGTCTTCAGTGTTTTCACAAGT

96468 TGTCACCAAAGAAAGATGGCTGTGAATATATTTAAAGGCTTGTGTTGAGTATTGCATCACT  
CATGCTCTTACCCAAGAACTTAGCTTTAATATTATTTTGTGTTCTAGTCAACAAAACAC  
TGAACAAATAAGGAACCAATTGTGATAATAATAATAATAACTTTGCATTGGTACAGTA

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CTTTACAGTCCATTGATTTTTTCCCCCTGCATTTTCCTTGAGTACCTCTGACACTAGGA  
 TTTGCAGATGTTAAGTGGGTCTAAGGAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAG  
 [G, A]  
 TCTTTTCATCTCCTCACTTCTCCCTGATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGA  
 GGTGGGTGGGGGTGGTTCATCTCTGAAAGCTGGAGGAAGGGGTGTAGCACTTGTGAGGAT  
 TAATGAGATGCCTGTTTCATCCAGTTCCAAGCCTCCACTTGTTCCTATGTCTGCAATAT  
 ATTTCTTCTGAGACACTTGGACAACCTATATTCCCCAAAGTTAGGCTATTGTGAGACAG  
 TCAAGCTGGGGTCTTCAGTGTTCACAAGTTACTTGAATGTTTCCAAGAGTCACCATAA

96501 AAAGGCTTGTTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATATT  
 ATTTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAATA  
 ATAATAATACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGCAT  
 TTTCCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAACTA  
 GGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTCC  
 [A, G]  
 TGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGTGGTTCATCTCTGAAAGCTGGA  
 GGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGTTCCAAGCCT  
 CCACTTGTTCCTATGTCTGCAATATATTTCTTCTGAGACACTTGGACAACCTATATT  
 CCCCAAAGTTAGGCTATTGTGAGACAGTCAAGCTGGGGTCTTCAGTGTTCACAAGTTA  
 CTTGAATGTTTCCAAGAGTCACCATAAACCTGCATAAAGTGAAGTGTAGAGGCTCATTT

97217 TTTTGCATATTTAAATCAAATCCTGGTGAGTAAAGGAAATACAAGATGAGGAAGCCTAG  
 CCTGAACACTCATTTTAGAAATGGAAGCTGTAATTTAGATTATTATAAGAGGTTTGAATG  
 ATTCAGAACAGAAGATTGCAAAAGAAAGTATCCAGGTGACTCATTTCCCGAAGGCAGAAGG  
 CAACCGTGAGTTCTGCAGGCCTGTGGGTGGCTGAATGATGGACTAACCATCAACGTTTTT  
 TTATCATGTTGCATTCCCAACCTGTCAATAACCATGGACCAATAACTCACTCATTTGAAT  
 [A, G]  
 GATTTCAGAAACAGGCCCCACATGATTTACCCAGATTGGGAGAATGGTTAGATTACTGTC  
 TAGATACTTTTAAACATAAGATTGTAATATCAATTGGCACAAAAATGAATATTAATTAAT  
 TTAGACTTTTCATCTCCATATAAAGTGTGCTAATGCTATAGGACTTTTCTTCCAGCAATA  
 CTTTCTTTAGCCTCATCCATATAGGGTAAGCCAGTACTCATTGTACATAAATTACTTAT  
 GTAATGGCAGTACTCTTAAGATTGCAGATGCGGGTATTTTCAAAGCACTATTGAAATAC

97449 ACGTTTTTTTATCATGTTGCATTCCCAACCTGTCAATAACCATGGACCAATAACTCACT  
 CATTGAATAGATTTCAGAAACAGGCCCCACATGATTTACCCAGATTGGGAGAATGGTTAG  
 ATTACTGTCTAGATACTTTTAAACATAAGATTGTAATATCAATTGGCACAAAAATGAATA  
 TTAATTAATTAGACTTTTCATCTCCATATAAAGTGTGCTAATGCTATAGGACTTTTCTT  
 CCAGCAATACTTTCTTTAGCCTCATCCATATAGGGTAAGCCAGTACTCATTGTACATAA  
 [A, G]  
 TTACTTATGTAATGGCAGTACTCTTAAGATTGCAGATGCGGGTATTTTCAAAGCACTATT  
 TGAATACATATTAGTAGACCTGACTATAAAAAGATTCTCTTGATTCAAACATCCATCA  
 ATAACTTTTAGCATCTTATTACCCTCAATGCAAGAGGTAGTTGGGTGGAGAGGTAGGAC  
 TCAGAGATGATGTGGAGTTCCAGTAAGAGAAAAAAGAACCAGATGGGGCGAACTTC  
 ACTGGCGGTGGGGAGAGACAGCACAAAGCCTTCCCTTCCTATTCTTCTGTTTTTAGA

98167 GAGCCCATGGGTAAGACTGTGAAAAAGAAGCTCTTGTCAAATCTAATAAGTGCAGTGGTG  
 ATTCCCTTCCACGCAATTCAGGTCTCGCTAAACTAGACATGCCCATGATGCTTGGTGTTC  
 AGAAAAAGGTGGTATCACTTTTTGTGAGAAATGAAAATGAAAGTTCTGAGTGACCATGAA  
 TTTCTTAAATGTGTTAATATCCAAGAAACCTTAAACCGTTTATAAGGGGAGAAGGAAG  
 AGAAGCAATGGAACAATGTTGCGAATTGTAGAGGGCCTTTGAAATGAAGTTCTACTCCCT  
 [A, G]  
 AAGCTCATAAGGTGGGGGAATGTACAAACTTTTAAAAAGTCTGTGAGTTCTTTGGTCAG  
 TATGCTAATTTCTCTGCCACTCTCCCTCTTTTCATATTTCTCACCAGGTATGGGAATA  
 TTGCTCCGAGCACTGAAGGAGGCAAAATCTTTGTATTTTATATGCCATCTTTGGAATTC  
 CACTCTTTGGTTTCTTATTGGCTGGAATTGGAGACCAACTTGAACCATCTTTGGGAAAA  
 GCATTGCAAGAGTGGAGAAGGTGTTTCGAGTGAGTACTGTGTCATATTTAAATTCTAACC

98430 AATTGTAGAGGGCCTTTGAAATGAAGTTCTACTCCCTAAAGCTCATAAGGTGGGGGAATG  
 TACAAACTTTTAAAAAGTCTGTGAGTTCTTTGGTCAGTATGCTAATTTCTCTGCCACTC  
 TCCCTCTTTTTCATATTTCTCACCAGGTATGGGAATATTGCTCCGAGCACTGAAGGAGG  
 CAAAATCTTTTTGTATTTTATATGCCATCTTTGGAATTCCACTCTTTGGTTTCTTATTGGC  
 TGGAATTGGAGACCAACTTGAACCATCTTTGGGAAAAGCATTGCAAGAGTGGAGAAGGT  
 [G, C]

$$\begin{array}{ccccccc} \{1\}^{11111} & \{1\}^{1111} & \{1\}^{111} & \{1\}^{11} & \{1\}^1 & \{1\}^0 & \{1\}^{-1} \\ \{2\}^{1111} & \{2\}^{111} & \{2\}^{11} & \{2\}^1 & \{2\}^0 & \{2\}^{-1} & \{2\}^{-2} \\ \{3\}^{111} & \{3\}^{11} & \{3\}^1 & \{3\}^0 & \{3\}^{-1} & \{3\}^{-2} & \{3\}^{-3} \\ \{4\}^{11} & \{4\}^1 & \{4\}^0 & \{4\}^{-1} & \{4\}^{-2} & \{4\}^{-3} & \{4\}^{-4} \\ \{5\}^1 & \{5\}^0 & \{5\}^{-1} & \{5\}^{-2} & \{5\}^{-3} & \{5\}^{-4} & \{5\}^{-5} \\ \{6\}^0 & \{6\}^{-1} & \{6\}^{-2} & \{6\}^{-3} & \{6\}^{-4} & \{6\}^{-5} & \{6\}^{-6} \\ \{7\}^{-1} & \{7\}^{-2} & \{7\}^{-3} & \{7\}^{-4} & \{7\}^{-5} & \{7\}^{-6} & \{7\}^{-7} \\ \{8\}^{-2} & \{8\}^{-3} & \{8\}^{-4} & \{8\}^{-5} & \{8\}^{-6} & \{8\}^{-7} & \{8\}^{-8} \\ \{9\}^{-3} & \{9\}^{-4} & \{9\}^{-5} & \{9\}^{-6} & \{9\}^{-7} & \{9\}^{-8} & \{9\}^{-9} \\ \{10\}^{-4} & \{10\}^{-5} & \{10\}^{-6} & \{10\}^{-7} & \{10\}^{-8} & \{10\}^{-9} & \{10\}^{-10} \\ \{11\}^{-5} & \{11\}^{-6} & \{11\}^{-7} & \{11\}^{-8} & \{11\}^{-9} & \{11\}^{-10} & \{11\}^{-11} \\ \{12\}^{-6} & \{12\}^{-7} & \{12\}^{-8} & \{12\}^{-9} & \{12\}^{-10} & \{12\}^{-11} & \{12\}^{-12} \\ \{13\}^{-7} & \{13\}^{-8} & \{13\}^{-9} & \{13\}^{-10} & \{13\}^{-11} & \{13\}^{-12} & \{13\}^{-13} \\ \{14\}^{-8} & \{14\}^{-9} & \{14\}^{-10} & \{14\}^{-11} & \{14\}^{-12} & \{14\}^{-13} & \{14\}^{-14} \\ \{15\}^{-9} & \{15\}^{-10} & \{15\}^{-11} & \{15\}^{-12} & \{15\}^{-13} & \{15\}^{-14} & \{15\}^{-15} \\ \{16\}^{-10} & \{16\}^{-11} & \{16\}^{-12} & \{16\}^{-13} & \{16\}^{-14} & \{16\}^{-15} & \{16\}^{-16} \\ \{17\}^{-11} & \{17\}^{-12} & \{17\}^{-13} & \{17\}^{-14} & \{17\}^{-15} & \{17\}^{-16} & \{17\}^{-17} \\ \{18\}^{-12} & \{18\}^{-13} & \{18\}^{-14} & \{18\}^{-15} & \{18\}^{-16} & \{18\}^{-17} & \{18\}^{-18} \\ \{19\}^{-13} & \{19\}^{-14} & \{19\}^{-15} & \{19\}^{-16} & \{19\}^{-17} & \{19\}^{-18} & \{19\}^{-19} \\ \{20\}^{-14} & \{20\}^{-15} & \{20\}^{-16} & \{20\}^{-17} & \{20\}^{-18} & \{20\}^{-19} & \{20\}^{-20} \end{array}$$

99879 AATCTCACTGATCCTGGGTCAGCTGCCTCAGTTTACTCATCCACAAAAGGGGATAGAATT  
TGAATCTACTTTGTCAGGTTTTGGTGATGATTAAATGAAATGATGTGTGGAAAAGAGCTT  
GTCATATAGGGCAGACATATAGAGCCAGGGCTTCTGTGTTTCTCTCAAGAGAAGCCCT  
CATGGGCAGGCTAGCCACTCATCCGGGTTTCATCTGAGGAGCTCTGTGGTGTGTGAGTTT  
TACTGGAATGTCCACAGCCTTTGCTCCTTCATGCTGGCTGGCCGGTGGCCTCATTAGAC  
[T.C]

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ATCTGGTAGTTTGAACACTCAGAACAGGATTCAATTGGGGAAATGACTGATCTGGCATT  
TTATTTTATGTAGCTTCTTTAGAGCTCAGTTTCCTTATTTGTAGAAGAAAGATTGGAC

99971 AAATGAAATGATGTGTGGAAAAGAGCTTGTTCATATAGGGCAGACATATAGAGCCCAGGGC  
TTCTGTGTTTCTCTCCAAGAGAAGCCCTCATGGGCAGGCTAGCCACTCATCCGGGTTTCA  
TCTGAGGAGCTCTGTGGTGTGTGAGTTTACTGGAATGTCCACAGCCTTTGCTCCTTCA  
TGCTGGCTGGCCGGTGGCCTCATTAGACTGTGCACCTGGGCTCCCCAGTAGTCTCCATGG  
AAACCATCAGTGCTCAGCTTCCCTGCTTTTCAGATGTTTAGTTCTTCTTAAACCAGACAT  
[A, G]  
GCAGCCCTGTCTCCAAGAACTCTTTTGAACCTTCTTGAAGCACCTTTTAGCTGCTGCCT  
CATGGCCCTCTGACTTAGAGAAAAAGAATCTGGTAGTTTGAACACTCAGAACAGGATT  
AATTGGGGAAATGACTGATCTGGCATTTTATTTTATGTAGCTTCTTTAGAGCTCAGTT  
TCCTTATTTGTAGAAGAAAGGATTGACTAAAAGTTTTTGAATCCTCCTTAGCAGAAAA  
AATTCTAGTTACTATATTTGAAGTGATGGAAGAGGTTGCAATCATCTGGACATCTGCTAC

100895 TCCTGCAGCAGTTTGTCTTGCTGCATGTAAAGTTTTGGTAGAAAATCTCAGTTTCTGCCA  
TTGATTTAACTACATTTAAAAGTCCAATTACGTTTAGGTGGTTATTTGAGAAATGAAAA  
TTGTATAAGCTAACAAAGCTTGGGGTTGTGAATTTTAGTTCTCATGGGGGAAGGTTTAT  
GTATTTCTTCTGCTCAATGAGTGTAAAGCCCTTCTCTGATCTGTTATGTTTCTCTCAG  
CTCTTGGGAAGAGAGGATTTACGGTGGAGTAAAAATAAATCTAAAGTTGGCTTCTGCC  
[G, A]  
GGCATGGTGGCTCACACCTGTAATCCTAGCAGTTTGGGAGGCTGAGGTGGGTGGATCACC  
TGAGGTGAGAAGTTCAAGACCATCCTGGCCAAGATGGTGAAACCCTGTGAGTACTAAAAA  
TACAAAAATTTGCAGGGCACGGTGGTGCATGCCCTGTAATCCCAGCTACTTGGGAGGCGGA  
GGCATTAGAATTGCTTGAACCCAGGAGGTGGAGGTTGCAGTGAGTTGAGATCGTGCCACT  
GCACCTCAACCTGGGTGACAGGTTGAGCCCTGTATTAATCAATCAATCAATAAATAAAG

100927 TTTGGTAGAAAATCTCAGTTTCTGCCATTGATTTAACTACATTTAAAAGTCCAATTAC  
GTTTAGGTGGTTATTTGAGAAATGAAAATTTGTATAAGCTAACAAAGCTTGGGGTTGTGAA  
TTTTTAGTTCTCATGGGGGAAGGTTTATGTATTTCTTCTGCTCAATGAGTGTAAAGCCCT  
TCTCTTGATCTGTTATGTTTCTCTCAGCTCTTGGGAAGAGAGGATTTACGGTGGAGTAA  
AAATAAAATCTAAAGTTGGCTTCTGCCGGCATGGTGGCTCACACCTGTAATCCTAGCA  
[G, C]  
TTTGGGAGGCTGAGGTGGGTGGATCACCTGAGGTGAGAAGTTCAAGACCATCCTGGCCAA  
GATGGTGAAACCCTGTGAGTACTAAAAATACAAAAATTTGCAGGGCACGGTGGTGCATGC  
CTGTAATCCCAGCTACTTGGGAGGCGGAGGCATTAGAATTGCTTGAACCCAGGAGGTGGA  
GGTTGCAGTGAGTTGAGATCGTGCCACTGCACTCCAACCTGGGTGACAGGGTGAGCCCT  
GTATTAATCAATCAATCAATAAATAAAGTAAATATAAAGTTGGTCTTCAAGATGCCTGAA

102805 AAAATGAACAGGATTACATAATTGTTTTGAGCTAATTATCCTTGAATACAAGGATCAATA  
ACAAGGGTGATGCCAGTCCAAGGTTGGACAGTCAGTTGCTGGGTAGATGTCTTCGCAGAA  
ATGCTTTTCTGCATAACGAGGTGATGGGTTTGTGCAAGGTTGTAGTTTTCAGTCTTT  
TATGATAGCTCTTGAATCAGGCATTTGTGCATGAGAATCCTTCCTTCCTGGCTTTCCCT  
GACTCTGTTTGTGAGGTTTAAAGCACAGTAACCCATTTTGATTCTGACAATTTTCAT  
[G, A]  
CTCCCAACACTCATTAACAATGGGTTAAGAATTTGAACCCTTATCTCACATAGCAAGAAG  
CCTGGAGGTACGTTGACTCAGGCTTGTGCTATCAGCTCCACAATGTGAGGTGATCCAGA  
TTTGTTACCTCTTTCTGCTCTGTTTTCTTGGCATGGTAGCTCTTCATCCTCAGACTTGT  
CACTCACATTGCAAGATGGCTGCTTCATGACCAAATAGCACGTTTTACCCAACCTCATA  
TCAGGAAATACAAAAGGAACCTCCCTTAAATTTATCTTTTTTTAGAGCAGTTGCATATTC

103462 CATGTGCAGTCTCCCTCATTATCAACATCCCGCACCAGACTGGTACATTTGTTACAATTT  
ATGAACCTACATTGATGCATCATTATCACCTAGAGTCCATAGTTTACATTAGGGTTCACT  
CTTGGTGTGTGAGAGTCTATGAATTTGGACAAATTTATAATGACATGCGTCTACCATTAT  
AGTATCATACATAGTATTTCACTCTCCTAAAAATCCTCTGTACCCTGCTTGTTCATCAAT  
CCCGTTCTCCTAACCTTTGACAATGACTCATGTTTTTATAGTTTTGTCTTTTCAGAAT  
[G, T]  
TCATTAATATGGTTTGGCTGTGTCCCCACCCAAATCTCAACTTATATCTCCAGAATTCC  
CATGTGTTTGGGAGGGACCCAGGGGAGGTAGTTGAATCATGGGGGCCAGTCTTTCTCTG  
TGCTATTCTCATGATAGTGAATAAGCCTCACGAGATTTGATAGGCTTATCAGGGGTTTCT  
GCTTTTGCTTCTCCTCATTTTTCTCTTGCTGCCACCATGTAAGAAATACCTTTCACCTC  
CCACCATGACTCTGAGGCCTCCCAGCCATGTGGAAGTGAAGTCCAATTAAGCCTCTTT

103811 TCCCAGAATTC CATGTGTTGTGGGAGGGACCCAGGGGGAGGTAGTTGAATCATGGGGGC  
CAGTCTTTCCTGTGCTATTCTCATGATAGTGAATAAGCCTCACGAGATTGATAGGCTTA  
TCAGGGGTTTCTGCTTTTGCTTCTCCTCATTTTCTCTTGCTGCCACCATGTAAGAAAT  
ACCTTTACCTCCCACCATGACTCTGAGGCCTCCCAGCCATGTGGAACGTAAAGTCCAA  
TTAAGCCTCTTTTTGTCCAGTTTCAGATATGTCTTTATCAGCAGCGTAAAAACGGACT  
[G, A, T]  
ATACAGTTGTGTAGTTGGAATCATACTGTATGTAGCCTTTTCAGACTGGCTTATTTCACT  
TAAATATGGATAAAAGTTTCTCTATGTCTTTTCATGGCTTGTAGTCCATTCTGCTGGG  
TGGTGAATAATATCCATTTTCTGGGTGTACCATAGTTTATGTATCCATTACCTACTGA  
AGGACATCTTGTGTTGCTCTAAGTTTGGTAATTACGAATAAAGCTGATATAAACCTCTG  
TGCACAGGTTTTTTGGTTGAACATTAGTTTTCAACTCCTTTAGTTAAATACAAAGATGTG

105461 CCTGTGCCATTTGTTGAAAAGACCTTTTTTTTTTTTCTCCATGTTGTGCGCTTTGCTCCT  
TTGTCAAAGGTAAGTTGACTATATTATGTGGTTCTATTTTGGGCTCTCTATTCTAGTTC  
ATTGACCTATTTGTCTATTCTTCTCCAATATCATACTGTCTTGATTACTTTGCTCTAT  
AGTAATTTGAGACGGA  
GTCTCGCTCTGTGCGCCAGGCTGGAGTGCAGTGGCAGATCTCGGCTCACTGCAAGCTCC  
[G, C]  
CCTCCCGGGTTACGCCATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGCGC  
CCGCCACTACGCCCGGCTAATTTTTTGTATTTTGTAGAGACGGGGTTTACCCTTTTA  
CCCGGATGTTCTCGATCTTCTGACCTCGTGATCCGCCCGCTCGGCTCCCAAAGTGCT  
GGGATTACAGGCGTGAGCCACCGCGCCCGGCGCCTCTATAGTAATTCTTAAAGCCAGT  
TAGTGTCACTCCTCCAATTTTTTTCTTCTTTTCAATATTGTGTTGACATCAGCTCCTTT

105981 ATAGTAATTCTTAAAGCCAGTTAGTGTCACTCCTCCAATTTTTTTCTTCTTTTCAATAT  
TGTGTTGACATCAGCTCCTTTTATGGAAGAAAAATCTTCCCAGAAGTTACCCTGTAGAT  
TTCCCCCTTCTGTCTCATTGACCAGAATGAGATCACATTAGCATCTGCAAGGGAGGATAGG  
AAAGGAAGTATCGGACAAAGGACGATAGTATTGCCATAATGGACCAGTGATTCTCAAAGT  
TTGGTCCCTCAACCTTAGGCATCAGTATCCCTTGGACCATCGGCATCGGCATCCACTGGA  
[A, G]  
ACTTGTTAGAAATGAAAATTATTTGTGGTGGTGGGGCGGTGGGGCTGGAGCTCAGC  
AATCTGTGTTTACCAAGCTGTCCAAGTGATTCCAATGCTTAAGGAGCAGAGGAATCATGT  
TTCATCTCTTGGGGCTGAACACATTGCTGTGATGAACAAAATTAGAATTCTGTTAGCGAA  
GAAGTTGGAGTAAGCAAATGATAACGTCTCACATAGATGTCAATTAACTGCTAGCCACTG  
AGATCACTCATAGAGAAGATGTCTTCACTCTTCTTGTCTATAAATTAGGTGGCTGTTGGG

106495 TAGATGTCAATTAAGTGTAGCCACTGAGATCACTCATAGAGAAGATGTCTTCACTCTTC  
CTTGTCTATAAATTAGGTGGCTGTTGGGATCCTTGAATCAATCAAGATAAGCTAGCCTATC  
ACAAACAGCCTACTCCCACTCCTGCCAGATCTGCTGCAACCCAGGCAGCTTCTCAGGCTC  
AGGGGCTAGATAGGGTGGGGGAAACAGCTGAGCGCTGCTTGGCTCTTCAGAGCGTTG  
TCCCTCAGGTAGAGCCATTGGCCCCGAGCTAGTTACCAGGTCCCATTCGTAGCTGCAAG  
[G, T]  
GGGTTTGGAAATGCATTCTTTTATCTCCAAGAATAGTAGTGGATGGTAAAATTGTTGCGCA  
CTGGTATAGTCATGTTTATATGCTCTAAGATGCACCTCTGGGTCCCACTCTAGGGTGACC  
AGCCTTTCAGGAATTTAGTTCCAGGTCGTTTGTGCATCACTCTTCGGGGGGAATACTACT  
ATTGTGAGACTCATAGATTTACACCTGAGAAAATGGAGCCTGTGAGGTGACTTGCCCTGG  
ATCCACACAGTGAATTGGTGGTAGGACCTGGATTAGAACCACTAATCCTGCCTTAACCTC

107077 CTAATCCTGCCTTAACCTCTTCCAGATGGGCTGAAAATATTAATGTCAGATTAATCTACA  
CCATGAAACCAATGTGGAGTTTAGAATATTTTAGTATACCATACTAATTAAGTAAAAAT  
AATTCTTCTCTGAGTTCCCAGGGAAATATCTGGGCAGTTAGCATCCCAAATATCTGCTTAT  
TTGGGATGAAGGAGGGCTGACATTGATTCTGAAGCAGGTTTTGGAAGCAGGCGGCTCT  
TTCTCCCCTGCTGTGGGTAGCTGTCTTGTCTGGGCCAGGCTGATTATCACTTGATAGGAT  
[G, A]  
CTGTAGGAAAACAGTCAAATCTGGACTGATTCTCATTTTCTTGGCTCCAAGCTGGACT  
TTGGCCTCTGGTAGGAAGTACCTGCTTCTTTTTTCCGGCTCGGATCAGCAGGCTTCTG  
GTATTTCTCTGTAAAACCAAGGGACACCTTTTTTTTTTTCTTTTTCTTTTTTGGCTTT  
CCCCCGCCCCAAGGATATGGCAGAAATGTTTATTGCTTATGGATCCAAATGATTCTGG  
GTGTCACTGACAAAATAATAAACATTACCCTAGACTTACGAGTGCCAAAATTACTTGGAA

107431 CTGGACTTTGGCCTCTGGTAGGAAGTACCTGCTTCTTTTTTTCCGGCTCGGATCAGCAGG  
CTTTCTGGTATTTCTGTAAAACCAAGGGACACCTTTTTTTTTTTTTCTTTTCTTTTTT  
TGGCTTTCCCCCGCCCCAAGGATATGGCAGAAATGTTTATTGCTTATGGATCCAAATG

FIGURE 3, page 93 of 107

ATTCTGGGTGTCACCTGACAAATAATAAACATTACCCTAGACTTACGAGTGCCAAAATTA  
 CTTGGAAAATTTAGAACAGGCCACATGTTTAAAGATGGAAGTGATGACAATCTCAAAGTGC  
 [T, G]  
 AATACGGTTAAATTAGTGGACTGATCAACCACCTTTAGATTCCAGGAAGGGGCATGTGGCG  
 GAAGCCAAAGACTCCTGCAGGCCCTCTGCCATGTGCCTGGCATGGATCAAGGAGAGGCTTT  
 TAAGAACACAATTGGCAGGAAGCTTCTGTTTCTCCAAGGCATCTTTGAGCTAGCATTCA  
 GCAGCAAAGGGTTAACTTAAATAATTACTATTTCAAGAGGCAGGCGCAGTGGTCCACA  
 TCTGTAATCACAGCTCTTTGGGAGGCCAAGACAGAAGGATTACTTGAGCCCGGGAGTTCA

107671 CTTGGAAAATTTAGAACAGGCCACATGTTTAAAGATGGAAGTGATGACAATCTCAAAGTGC  
 TAATACGGTTAAATTAGTGGACTGATCAACCACCTTTAGATTCCAGGAAGGGGCATGTGGC  
 GGAAGCCAAAGACTCCTGCAGGCCCTCTGCCATGTGCCTGGCATGGATCAAGGAGAGGCTT  
 TTAAGAACACAATTGGCAGGAAGCTTCTGTTTCTCCAAGGCATCTTTGAGCTAGCATTCA  
 AGCAGCAAAGGGTTAACTTAAATAATTACTATTTCAAGAGGCAGGCGCAGTGGTCCAC  
 [A, G]  
 TCTGTAATCACAGCTCTTTGGGAGGCCAAGACAGAAGGATTACTTGAGCCCGGGAGTTCA  
 AGACCAGCCTGGGCAACATAGTGAGACCCCATCTCTGAAAAAAGAAAAATCGAGCCC  
 GGGCGTGGTGGCTCATGCTGTAATCCAGCACCTTTGGGAGGCAGAGGCAGGCAGATCAC  
 TTGAGGTCAGCAGTTTGAGACCAGCCTGGCCAACATGATGAAACCCTGTTCTACTAAAA  
 ATACAAAATTAGCCTGGCATGGTGGTGTGTGCTTATAGTTCTAGCTACTCGGAGGCTG

108826 CCATATGTCTCTGGAGTATCTGCTTCTATGTCTGCCTGCCCTAGTACATACCATATTAT  
 AAGTTCCTAACAACTAACTCAGTAGGATTAATGTTACATAATAATGTGAGTTTATTTATT  
 TATTTATTGAGACGGAGTCTCACTCTGTTGCCAGGCTGGAGGGCAGTAGCATGATCTCG  
 CCTCACTGCAACCTCCGCCTCTTGGGTTCAAGCGACTCTCCTGCCTCAGCCTCCTGAGTA  
 GCTGCGGTACAGGCGCTGCCACCATGCCTGGCTAATTTTGTATATTTTGTAGAGAGA  
 [C, T]  
 GAGGTTTCACCATATTGGCCAGGCTGGTCTCGAACTCCTTACCTCGTGATCTGCCACCT  
 TGGCCTCCCAAACTGCCGGGATTACAGGCATGAGCCACCACGCCCTGCCGTGAGTTTATT  
 TTTATCAGAGAGAAGGCCCTGGTTTTAATGTAAACAATTGCTTTCTCCTTTTCTAGGC  
 GGCAAGAAGGTAGGAAGTAATTATTTGAAAATGCAAATAATTTTAAAGCTTTATCAATCA  
 AGTCTGTTCCAAATTAGTTTAAAGGATTTTCTGTAGCTTTAATGATAGGGCCAGAATGTAC

111310 TAAAGGATTTTAGTTTTCTGACTTCATGCTCTCTCTCAGTGTGTTGAATTGCATCATAG  
 CCTCTGGTTCTTTATGTATCTGCTTTAGTTCCCTAATACCAGCTCATTATTAGTTAATAT  
 CTCTTTCTTTGTGTTCTCTTTCTTGGAGGTTAATCTAAGATTTAGGTGTCCCCTTGCTC  
 ATGTCTGCTGTATGTGACTAATACAAAGATGGGTATATATTCTGGTATCACTATAGGAC  
 ATTAAGGTAATGTCAAAACCACAATTACTTTTGTACCAACCTAATAAAGAGGGGCTT  
 [T, A]  
 TACTGTACCAATAGCTGACTTGTTTTTGACCCACCTCTGCGAGAGCAGTTGCCAGGCAAAG  
 ATAGTCCCCACTCTGTTCTTCCATCCACTGCTCTACTTTGTACAACCTGCTTAATGTTAA  
 AAACAGGAGGAAATGCACAGCTCAAAGCCAAGCCTCTTGGTGCCCTGAGATAGCTGGCCT  
 TGTCTCCAAAGCATTCTTCTTTTCTGGGCTCATCAGAATGCCTCAATGCTCTGCTTCG  
 ATGGTTTTAAGAGCATAGAGTGGCTTGGTGTGGTGACTCAAGCCTGTAATCCAGCACTT

112035 CCCAGCTACTTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCA  
 GTGAGCCAAGATCACACCACTGCACTCCAGCCTGGGCAACACGAGTGAAACTCTGTCTCA  
 GTAATAATAATAATAATAATAATAATAATAATAATAATAATAATAAAGTAAAATAAAAAG  
 AGCATAGAGTTTGAGACCATCACCAAGATTTTAAATCCCACTGGGGATTTAACTCAG  
 TCCTAAACTCAAGGTCTGCTATGTCAAGTAGTATTAAATATCTCTTCTTTTAAAGGCCA  
 [T, -]  
 TTAGCTCTTTTCTCATATCTTTTCTGATTTTGTGCTGGTTTTCCCTAAGGCTTCTGAAACTCT  
 TAAAACATCTCTGATAGAGGAACTATCTAGAAAATTTTATGGGTATTCTATTATCAGTGA  
 GGTCTTTCTCATTTGAAGAGATAATCACTTCTTAGAATCCAGGGGTTTCATTAAGTATTA  
 ATAAAAGGTTTTATATTTTGTGCTTTTGGGGCTAGTGAAAGTCTAGTGATGCTTTAGGTC  
 TACAACATGGTAAACTGTATTTAAAGATTCAGGTGCTTTTGAGTTATGAATTTAATGCA

112038 AGCTACTTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCAGTG  
 AGCCAAGATCACACCACTGCACTCCAGCCTGGGCAACACGAGTGAAACTCTGTCTCAGTA  
 ATAATAATAATAATAATAATAATAATAATAATAATAATAATAAAGTAAAATAAAAAGAGC  
 ATAGAGTTTGAGACCATCACCAAGATTTTAAATCCCACTGGGGATTTAACTCAGTCC  
 TAAACTCAAGGTCTGCTATGTCAAGTAGTATTAAATATCTCTTCTTTTAAAGGCCATTT  
 [T, -, A]



GCTCTTTCCTCATATCTTTTCAGATTTTGCTGGTTTTCCCTAAGGCTTCTGAAACTCTTAA  
AACATCTCTGATAGAGGAACTATCTAGAAAATTTTATGGGTATTTCATTATCAGTGAGGT  
CTTTCTCATTGAAGAGATAATCACTTCTTAGAATCCCAGGGGTTTCATTAAAGTATTAATA  
AAAGTTTTATATTTTGCATTTTGGGGCTAGTGAAAGTCTAGTGATGCTTTAGGTCTAC  
AACATGGTAACTGTATTTAAAGATTCCAGGTGCTTTTGAGTTATGAATTTAATGCAAGA

112066 TCACCTGAACCTGGGAGGCGGAGGTTGCAGTGAGCCAAGATCACACCACTGCACTCCAGC  
CTGGGCAACACGAGTGAAACTCTGTCTCAGTAATAATAATAATAATAATAATAATAA  
TAATAATAATAATAAAGTAAAAATAAAGAGCATAGAGTTTGAGACCATCACCAACAAGA  
TTTTAATTCCCACTGGGGATTTAACTCAGTCCTAAACTCAAGGTCTGCTATGTCAAGTAG  
TATTAAATATCTCTCTCTTTTAAAGAGCCATTTAGCTCTTTCCTCATATCTTTCAGATTTT  
[G, T]  
CTGGTTTTCCCTAAGGCTTCTGAAACTCTTAAACATCTCTGATAGAGGAACTATCTAG  
AAAATTTTATGGGTATTTCATTATCAGTGAGGTCTTTCTCATTGAAGAGATAATCACTTCT  
TAGAATCCCAGGGGTTTCATTAAAGTATTAATAAAGGTTTTATATTTTGCATTTTGGGG  
CTAGTGAAAGTCTAGTGATGCTTTAGGTCTACAACATGGTAAACTGTATTTAAAGATTCC  
AGGTGCTTTTGAGTTATGAATTTAATGCAAGAATTCTATTAGCAATCACATTTTACTAG

114098 AAGTTGAGATCACTGGTCTTTCAAGTTAGCATCAATTTCCATGACATTCTGGGCTTTCTT  
TTTTCTGTGGATTTAACATTTTCATCCTGGCCATAGTCATTGTTACAAAGATTTTTTTTT  
TTTTTTTTTGTAGATGAAGTCTAGCTCTGTTGCCAGGCTTGACTGCAATGGCACAGATCTC  
GGCTCACTGCAACCTCTGCCTCTCAGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGT  
AGCTGGGATTACAGGCACCTGCCACTGCCCTGGCTAATTTTTGTATTTTGTAGTAGAGACG  
[G, A]  
GGTTTTCAACATTTTGTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTC  
GGCCTCCCAAAGCACTGGGATTACAGCCGTGAGCCACCGCGCCTGGCCAGAAGTTTCTT  
TTCTCTAAGTTACTCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCT  
TTATGCCCTTTTTTAAATGTGTGTTAAAGTGTGCACAACATAAAATTTACCATCTGTTTTT  
AAGTGACAGTTTCAAGTACATTACATTTGTTGTGCAACCATCACTACCATC

114293 CTGCCTCTCAGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGG  
CACCTGCCACTGCCCTGGCTAATTTTTGTATTTTGTAGTAGAGACGGGGTTTACCATT  
GTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTCGGCCTCCCAAAGCA  
CTGGGATTACAGCCGTGAGCCACCGCGCCTGGCCAGAAGTTTTCTTTCTCTAAGTTAC  
TCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCCTTTTTT  
[A, -]  
ATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGACAGTTTCA  
TGGCATTAAGTACATTACATTTGTTGTGCAACCATCACTACCATCATCTCCAGAACTTTT  
CCATCTTCCCAAATGACAACTCTGAGTCTGTTCAATAATAACTGCTCATTTCTCTCCCC  
CAGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCAACCACTCCGGGAAC  
CTCATGTCAATGGAGTCATATAGTGTGTTGTCTGTTGTGCTGGCCTATTTCACTTAGCA

114413 GTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTCGGCCTCCCAAAGCA  
CTGGGATTACAGCCGTGAGCCACCGCGCCTGGCCAGAAGTTTTCTTTCTCTAAGTTAC  
TCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCCTTTTTT  
AATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGACAGTTTCA  
GTGGCATTAAAGTACATTACATTTGTTGTGCAACCATCACTACCATCATCTCCAGAACTTT  
[-, C, T]  
CCATCTTCCCAAATGACAACTCTGAGTCTGTTCAATAATAACTGCTCATTTCTCTCCCC  
CAGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCAACCACTCCGGGAAC  
CTCATGTCAATGGAGTCATATAGTGTGTTGTCTGTTGTGCTGGCCTATTTCACTTAGCA  
CAGTGTCTTTAAGGCTTATGAATATTGCACATGTGTGCAATTTCTTCTCTTCAAGGC  
TGAGTAATATCCCCCTGTCTGTATATACCACATTTTGCCCTATTTGTTTATCTGTTGATGG

114414 TCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTCGGCCTCCCAAAGCAC  
TGGGATTACAGCCGTGAGCCACCGCGCCTGGCCAGAAGTTTTCTTTCTCTAAGTTACT  
CCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCCTTTTTT  
ATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGACAGTTTCA  
TGGCATTAAAGTACATTACATTTGTTGTGCAACCATCACTACCATCATCTCCAGAACTTTT  
[-, C]  
CATCTTCCCAAATGACAACTCTGAGTCTGTTCAATAATAACTGCTCATTTCTCTCCCC  
AGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCAACCACTCCGGGAAC  
TCATGTCAATGGAGTCATATAGTGTGTTGTCTGTTGTGCTGGCCTATTTCACTTAGCAC

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AGTGTCTTTAAGGCTTCATGAATATTGCACATGTGTGAGAATTTCTTCCTTTCAAGGCT  
GAGTAATATCCCCCTGTCTGTATATACCACATTTTGCCTATTTGTTTATCTGTTGATGGA

114692 TACCATCATCTCCAGAACTTTTCCATCTTCCCAAATGACAACCTCTGAGTCTGTTCAATAA  
TAAC TGCTCATTTTCTCTCCCCAGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTA  
TGAATTTCAACACTCCGGGAACCTCATGTCAATGGAGTCATATAGTGTTCCTTTTGT  
GTCTGGCCTATTTCACTTAGCACAGTGTCTTTAAGGCTTCATGAATATTGCACATGTGTC  
AGAATTTCTTCCTTTCAAGGCTGAGTAATATCCCCCTGTCTGTATATACCACATTTTGC  
[C, T]  
TATTTGTTTATCTGTTGATGGACTTTTGGGCTGTTTCCACTTTTGGTTGTTATGAATAA  
TGCTGCTATGAACATGGGTGTATAAACATCTATTCAAGTCCCTGTTTTAATTATTTTGG  
ACATATACCCAGCAGTGAATTGCTGAGTCACATATAATTACAGATTTAATTTTCTGAG  
GAACCGTGACACTGTTTTCTACAGTGGCTGCACCATTTACATTCCCACCAACAATGCCC  
AGGGATTCTGTCTTTCCACTTCCTCACCAACACTTGCTTTTTTCTGTTTTTTTTTTTTT

115696 GGTCAACTTGATAAACAATTATCGAATAACACTTTTTTGTGTGTGTTCTCAACACTATAG  
GGATATGTGGCAATAAACAAGGGATAGTCTTTTCTCTTAAGGAGAAAACAGCCATGCATC  
AAGACCAGTGTCCATAATATTGTGCAGAATGATACCAGGGCTAGGGCAGGCAGGCTCTGA  
AGTCACACCACCTTGGGTGAATGATCCATGCTATGTCTACTTCTTATCAGCTATGTGACC  
TCAGGCTGTGCCTCAGTTTTCTATTGAAAAAATGAGGATAAATGGTTCCTGTCTGT  
[A, T]  
TTGGCACTTAGTTGACACTTGAGAGCAGTGTCTGCCACATAGCCTCAATCAATGCTATTCT  
ACTATTATTGTAGAACACTGTTAGCTATGGGAGCCCAGAGAGGGACTTGTTAAGTCTAGC  
TTGTATATTTACATCACACAAGCACCTGCCTTGTCTTGCCAATGGATTGTTCTGCTCAA  
GTAAAGCATAGGGGCTTAAAGCTAAATGTTACTGTGCCTTTATTGGCCTGTATCCCTGTA  
GGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTCAAGTAAATATTATTGATTGTGAATT

116153 TTGCCAATGGATTGTTCTGCTCAAGTAAAGCATAGGGGCTTAAAGCTAAATGTTACTGTG  
CCTTTATTGGCCTGTATCCCTGTAGGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTCA  
GTAAATATTTATTGATTGTGAATTGATTAGAGAGGAGAGAGACACGAACCAGGTCTTTTT  
CCAAGCACCCAGGATGTGTAAGCTTCACAAATGAAGAGATGCTTGCTGATGCTGCCCTCT  
GTCTTACCTTCCTGGAAATGGGCATGGAGGTGGGTGGGGCTGGAGAAGTGGAGGGGGCC  
[A, C]  
CAGAAAGGGTAGCGACAGAGAGAAAGAAACCCATGGGCAACAGGGTCTGTATCTGGGACG  
GGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGATGCAGCGA  
GCCCTTTGAAAGGCAACAGCACAAAGCAAGAGTGCAGACGGCAGGTTCGTCGGCTCCTC  
TGGGGCTCCCCAGGGGATGCCGTTGCCATTTCGGTCTGCGTGAAGGAGGCAGGTTGTCTT  
CTTCGTCGTCGGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCATGTGATC

116213 CCTTTATTGGCCTGTATCCCTGTAGGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTCA  
GTAAATATTTATTGATTGTGAATTGATTAGAGAGGAGAGAGACACGAACCAGGTCTTTTT  
CCAAGCACCCAGGATGTGTAAGCTTCACAAATGAAGAGATGCTTGCTGATGCTGCCCTCT  
GTCTTACCTTCCTGGAAATGGGCATGGAGGTGGGTGGGGCTGGAGAAGTGGAGGGGGCC  
ACAGAAAGGGTAGCGACAGAGAGAAAGAAACCCATGGGCAACAGGGTCTGTATCTGGGAC  
[G, A]  
GGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGATGCAGCGA  
GCCCTTTGAAAGGCAACAGCACAAAGCAAGAGTGCAGACGGCAGGTTCGTCGGCTCCTC  
TGGGGCTCCCCAGGGGATGCCGTTGCCATTTCGGTCTGCGTGAAGGAGGCAGGTTGTCTT  
CTTCGTCGTCGGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCATGTGATC  
TTACCACATACGCAGATTCTAGTAAAAAAGAAGAAAAAATCCAAGAATGAGTGAGAATT

116507 TGGGACGGGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGAT  
GCAGCGAGCCCTTTGAAAGGCAACAGCACAAAGCAAGAGTGCAGACGGCAGGTTCTGTCG  
GCTCCTCTGGGCTCCCCAGGGGATGCCGTTGCCATTTCGGTCTGCGTGAAGGAGGCAGG  
TTGTCTTCTTCGTCGTCGGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCA  
TGTGATCTTACCACATACGCAGATTCTAGTAAAAAAGAAGAAAAAATCCAAGAATGAGT  
[G, A]  
AGAATTTATTTTAGCTACATGCTGACTGCCTCTCAGCTTGCCCGTGTCTTACCAGATCT  
TGAAAACAAGGGCCAGTTTGATTTTTATAAAAAATGCATCAAAGTGTTACTAAAAGATCC  
TAAAGGAAGACTAAAGTTTCTCCGAAAAGAAGCCTGGCCCTTCAAATACCAACAAGGGA  
TCCTCGGAAGATGGGTTTTACTGAGCTCAAACACTGTCTCTTCTGTTTAGATACTGTATT  
ATTACATCATTTCCCTCTCAGATTGAGTGATGTTTCTCCATTATTTGTTCCGTTCCCTT

116796 CAAGAATGAGTGAGAATTTATTTTAGCTACATGCTGACTGCCTCTCAGCTTGCCCGTGCT  
CTTACCAGATCTTGAAAACAAGGGCCAGTTTGTATTTTATAAAAATGCATCAAAGTGTT  
ACTAAAAGATCCTAAAGGAAGACTAAAGTTTCTCCGAAAAGAAGCCTGGCCCTTCAAAT  
ACCAACAAGGGATCCTCGGAAGATGGGTTTTACTGAGCTCAAACACTGTCTCTTCTGTTT  
AGATACTGTATTATTACATCATTTCCCTCTCAGATTGAGTGATGTTTCCTCCATTATTT  
[G, T]  
TTCCGTTTCTTGCGAGAAGTGAATTTACCATGAACAACATCTGCAGTCTTTCTATACGA  
GCCTGGGGAATGCTTGAAAGAAGTGTACTAAATTATTATTATTAATATTTGTTTGTCTA  
CCTATCCACTCCCCACCCCAAGTCCCTCTCACTCCCGAGTAGTCACAAATGGGTGTAT  
CGGGCATCTCGTCTCAGTTGTGAGGACTGTCCCTTCTCATTTCTAAACTATTTGTCAGATT  
AGCTTGAGCAATTAGAATCAGGAATAGATATCATGTGGTTAAAAATAAAGGGAATTTATC

117142 AGTCTTTCTATACGAGCCTGGGGAATGCTTGAAAGAAGTGTACTAAATTATTATTATTA  
ATATTTGTTTGTCTACCTATCCACTCCCCACCCCAAGTCCCTCTCACTCCCGAGTAGT  
CACAAATGGGTGTATCGGGCATCTCGTCTCAGTTGTGAGGACTGTCCCTTCTCATTCTAA  
ACTATTTTGCAGATTAGCTTGAGCAATTAGAATCAGGAATAGATATCATGTGGTTAAAAAT  
AAAAGGGAATTTATCTACAATTTGAAAATAGATTACAGAGAACTTCCATGTGATTTTTTT  
[T, A]  
AAAAATAAAATTTTGTGTGTACTATAACAGAGTTGGCACCAGAGCTAACAAAAAAAAG  
CAAGTATCAACATTTAAAATGCAGTACATGACATGTAAATGCCATATGGTATTTCTTGCAA  
TGTTATTACCATTCTTTCTGGCATCCTTTTCTGACATTGCTGTATGCTTCTTGACTC  
TGCTGCTCTTCAGAAAGCCTCAATTGTCTGAGCCCTTTAATTCTGTATTTATATTAGGT  
GTCTCTCTCTTTTATCTACCCTTTGGAGGCTTATCAACCTTTTCCCAAGGAAGAGGAAG

118270 GCAAATAACATCTTGTAGACCCCAAGAATAACATTCTACTGTATTGATGGTGGGCA  
TCCCCATCAGCCTATGAGTTGTGTGAGGTGGGTCCCCTCTGCCTGTTCACTGTCATC  
TTCAGGTGCTAGCACATGGCCTGGAACCCAGAGAGCACTTAATCCATACTTGATGAATCA  
ATGAATGAACATTGCTAGACATAACCTTATACATCTTGATATAGAAAATGACCTTGAAGC  
TGGACTAGGTCCCAGTTACTTGAGAGGCTGAGGCTGGAGGATCAGCCAGCTTGGGCAGC  
[G, C, A]  
TAGTGAGACATCCCCCTATCCCTCCTACTCTCCTAATCCTGCACAATCCCCCTCTAAAAAA  
AGATAAACAGAGTGACCTTGGGCTGGCGCTGTGGCTCGCGCCTGTAATCCCAGCACTTTG  
GGAGGCTGAGGCGGGCGGATCATGAGGTGAGGAGATCGAGACCATCTGGCTAACATGTT  
GAAACCCCGTCTCCTCTAAAAAATACAAGAAAATTAGCCGGGCGGATGGCGGGCCCTG  
TAGTCCCAGCTGCTCGGGAGGCTGAGGCAGGAGAATGGCGTGAACCTGGGAGGCGGAGCT

118495 AAATGACCTTGAAGCTGGACTAGGTCCCAGTTACTTGAGAGGCTGAGGCTGGAGGATCAG  
CCCAGCTTGGGCAGCATAGTGAGACATCCCCCTATCCCTCCTACTCTCCTAATCCTGCACA  
ATCCCCCTCTAAAAAAGATAAACAGAGTGACCTTGGGCTGGCGCTGTGGCTCGCGCCTG  
TAATCCCAGCACTTTTGGGAGGCTGAGGCGGGCGGATCATGAGGTGAGGAGATCGAGACCA  
TCCTGGCTAACATGGTGAAACCCCGTCTCCTCTAAAAAATACAAGAAAATTAGCCGGGCG  
[C, T]  
GATGGCGGGCCCTGTAGTCCCAGCTGCTCGGGAGGCTGAGGCAGGAGAATGGCGTGAAC  
CTGGGAGGCGGAGCTTGCAAGTGAGCCGAAATTGCACCACTGCACCTCCGGCCTGGGCGACA  
AAGTGAGAATCTGTCTCAGAAAAAATAAAGAGAGTGACCTTGAATCGAA  
ACTAGTATTGTATGCAATAAATGGCAATGGGGAATAAAGTTCTTAGGCTTTGAAGTCC  
AATTATTTGAATAAAAGATGGGTCTGTAGGGAGCTGCTCCCTGCTAATGCTTATTGCCA

119314 AGATAATTCTGAAAAATCAATGCAATTTTCTAGCTATAATATAAAGGAGAAATAAATG  
GAAAGTAATGTTTCAATAATAGGTGCTCTGTTATGAAACCTAGGAGACCTGCTGAAGCA  
GTGAGTCTTGGCATCTATACGTAGAATGCAATATCTCCAAATGCAGATTGGTTTCAAGTAT  
GTTGTGTTGATGACTAAGATGTCACAAAGGACTTTTTCTCCAGTGGTGTGGTTTTCCAAA  
ATAGAGAACAACCTCTCAGCAAGGTTCCAGCTAATCTATTACATTAGAGTCAGATTCTTA  
[A, T]  
AAAATTTGGTCAACTTTGAAAAGATGCAACAATTTGTGTGTGTCTTCACATGTAAAA  
GGGAGTTAGGTTCTTGGCTCAGATAATTGTAGACATGAGTTTTCTCAGTGGGACATTC  
AAGCTCATGTAAATGTGGGATGGTTCTGTGATTTGTGGCACTGATTGTTGTATTGCAGG  
ACATCTGAACGCTTTTGACCTCTCCAGTACATGCCAACGTGCCCTCCAGTTGTGAC  
AACCGCAAACACCTAACAAAGTTTAGAGACCACCTCCTAGGGTGTGTAATCTAACAGG

119740 CATGCTAAATGTGGGATGGTTCTGTGATTTGTGGCACTGATTGTTGTATTGCAGGACATC  
TGAACGCTTTTGACCTCTCCAGTACATGCCAACGTGCCCTCCAGTTGTGACAACCG  
CAAACACCTAACAAAGTTTAGAGACCACCTCCTAGGGTGTGTAATCTAACAGGTTAT

FIGURE 3, page 97 of 107

AAACAGAGCTTCCAGGGGGCTCCCATGTAACCTTCAAGAATTTACATATTTAATTTCTAT  
TCTCGTGAAAATGGCCATGTTCCAATAGTTAAGCCTCTCCCTTGATGTATTTCCCATGC  
[T, C]

ATTAATATTTCAGTTCTATTCCACAAATATTTATTATATGCATATGTGTGTGTACATCCAT  
CTGACTATACCTTTCTATGTTATGTACCTTTACTAGAATTCCAAATTATAAAATCCTGTC  
AGTTTATCTCTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAG  
TACTCTCATATTTTCTTGAGGTGCTAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTAC  
GGGCCAGGCGTGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGG

119899 TTGTAATCTAAACAGGGTTATAAACAGAGCTTCCAGGGGGCTCCCATGTAACCTTCAAGA  
ATTTACATATTTAATTTCTATTTCTCGTGAAAATGGCCATGTTCCAATAGTTAAGCCTCTT  
CCCTTGATGTATTTCCCATGCCATTAATATTCAGTTCTATTCCACAAATATTTATTATAT  
GCATATGTGTGTGTACATCCATCTGACTATACCTTTCTATGTTATGTACCTTTACTAGAA  
TTCCAAATTATAAAATCCTGTCAGTTTATCTCTTGCTAGATGAATGGTTTTATTGTTTTT  
[G, A]  
TAGAATATTTGCTTTAAACAGTACTCTCATATTTTCTTGAGGTGCTAAAATAGAGGAGGC  
AGCTGTAGAAAAATGCACTACGGGCCAGGCGTGGTGGCTTATGCCTATAATCCCAGTACT  
TTGTGAGGCCAATGTGGGCGGATCATGAGGTCAAGAGATTGAGACCATCCTGGCCAACAT  
AGTGAAACTCCATCTTACTAAAAATACAAAAATTAGCTGGGCATGGTGGTGCATGCCTGT  
AGTCCCAGCTACTCGGAGGCTGAGGCAGAGAATCACTTGAACCCGGGAGGCAGAGGTT

119990 ATGGCCATGTTCCAATAGTTAAGCCTCTTCCCTTGATGTATTTCCCATGCCATTAATATT  
CAGTTCTATTCCACAAATATTTATTATATGCATATGTGTGTGTACATCCATCTGACTATA  
CCTTTCTATGTTATGTACCTTTACTAGAATTCCAAATTATAAAATCCTGTCAGTTTATCT  
CTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAGTACTCTCAT  
ATTTTCTTGAGGTGCTAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTACGGGCCAGGC  
[G, A]  
TGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGGATCATGAGGT  
CAAGAGATTGAGACCATCCTGGCCAACATAGTGAAGCTCCATCTTACTAAAAATACAAAA  
ATTAGCTGGGCATGGTGGTGCATGCCTGTAGTCCCAGCTACTCGGAGGCTGAGGCAGAA  
GAATCACTTGAACCCGGGAGGCAGAGGTTGCAGTGAGCCGAGGTCACGCCATTGCACTCC  
AGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAAAGAAAAGAAAA

120169 TCTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAGTACTCTCA  
TATTTTCTTGAGGTGCTAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTACGGGCCAGG  
CGTGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGGATCATGAG  
GTCAAGAGATTGAGACCATCCTGGCCAACATAGTGAAGCTCCATCTTACTAAAAATACAA  
AAATTAGCTGGGCATGGTGGTGCATGCCTGTAGTCCCAGCTACTCGGAGGCTGAGGCAG  
[A, G]  
AGAATCACTTGAACCCGGGAGGCAGAGGTTGCAGTGAGCCGAGGTCACGCCATTGCACTC  
CAGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAAAGAAAAGAAA  
AGAAAAGAAAAATGCACTGTGCCAGGCACCTAGAACATTGAGATGAAGGAGCACACTGTG  
TAGTAGGGAGACACATGGATGGATGGACAGACAGTGTGAGGTTGAGCAGTTCTATGGA  
CAGGGGACCATGCAAGGTTGAAGGAACATGGACAGCAGAGAGCAAGAACTGGAGAGGGCT

120519 CCATTGCACTCCAGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAA  
AAGAAAAGAAAAGAAAAGAAAATGCATGTGCCAGGCACTTAGAACATTGAGATGAAGG  
AGCACACTGTGTAGTAGGGAGACACATGGATGGATGGACAGACAGTGTGAGGTTGAGC  
AGTTCTATGGACAGGGGACCATGCAAGGTTGAAGGAACATGGACAGCAGAGAGCAAGAAC  
TGGAGAGGGCTTCTGCAAGAGGTAATGTCAGAATTGTGTGTGAGGAATGAACAGGAGTC  
[C, T]  
GACAAGCATTAAAAAGGGCGAAGAACCCTTATCCTAGCAGATGGAACAGCCCTTAAAAGGG  
CACAGAAGCTAAAAAGAAATGAGCTATGAAGCCATGAGAAGATGTAGAGGAATGCTAAAT  
GCATATTGCTGCGTGGAAGAGCCAATCTGAAAAGGCTACATGCAGTATGATTCCAACATA  
CATGACATTCTAGAAAAGTCTAAACTATGGAGACAGTTACAAAGATCCATGATTGCCAAG  
AGCCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTTAGGCTAGGGAAC

120812 AGGAGTCCGACAAGCATTAAAAAGGGCGAAGAACCCTTATCCTAGCAGATGGAACAGCCCT  
TAAAAGGGCACAGAAGCTAAAAAGAAATGAGCTATGAAGCCATGAGAAGATGTAGAGGAA  
TGCTAAATGCATATTGCTGCGTGGAAGAGCCAATCTGAAAAGGCTACATGCAGTATGAT  
TCCAACATCATGACATTCTAGAAAAGTCTAAACTATGGAGACAGTTACAAAGATCCATGA  
TTGCCAAGAGCCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTTAGGCT  
[A, G]

FIGURE 3, page 98 of 107

GGGAAACTATTGTGTATGATACTATAATGGTGGATACATGTCATCAGACGTTTGTCCAAA  
 CCCATAGGATGTACAGCACCACAGTGAACCCCTAATGTATACTATGGATTCTGGATGATA  
 TTGTCAGTATAGGCTCATCACTTGTAAACCAGTGCACACTCTGGCATGGGATGTTGATAG  
 TGGGGAAGGCTGTGCATGTTTGGGGCGGGGCTATATGGGAGATCTCTGTACCTTTCTCT  
 TAATTTTGCTGTGAAGCAAAAATGGTTCTAAAAAATCAAATCTTGA AAAAGGCAC TGAA

121053 TGCCAAGAGCCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTTAGGCTA  
 GGGAAACTATTGTGTATGATACTATAATGGTGGATACATGTCATCAGACGTTTGTCCAAA  
 CCCATAGGATGTACAGCACCACAGTGAACCCCTAATGTATACTATGGATTCTGGATGATA  
 TTGTCAGTATAGGCTCATCACTTGTAAACCAGTGCACACTCTGGCATGGGATGTTGATAG  
 TGGGGAAGGCTGTGCATGTTTGGGGCGGGGCTATATGGGAGATCTCTGTACCTTTCTCT  
 [T, C]  
 AATTTTGCTGTGAAGCAAAAATGGTTCTAAAAAATCAAATCTTGA AAAAGGCAC TGAA  
 ATAGAAATGGAGCAGTATTGGGGCACCATAAAACCATCCAGTCTCTCCAGAACTGCAAAC  
 TAAGTCTACTACAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGTAGGG  
 GGGAGTTGGGGGAAATGGCGGGGGTGGGGTCCCTGACAGTTTCTCAGAAAGTGGGTTG  
 ACGTATTCTGGAGGAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTTCT

121246 CTCATCACTTGTAAACCAGTGCACACTCTGGCATGGGATGTTGATAGTGGGGAAGGCTGT  
 GCATGTTTGGGGCGGGGCTATATGGGAGATCTCTGTACCTTTCTCTTAATTTTGCTGTG  
 AAGCAAAAATGGTTCTAAAAAATCAAATCTTGA AAAAGGCAC TGAAATATAAAATGGAG  
 CAGTATTGGGGCACCATAAAACCATCCAGTCTCTCCAGAACTGCAAACTAACTGCTACTA  
 CAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGTAGGGGGAGTTGGGGG  
 [G, A]  
 AATGGCGGGGGTGGGGTCCCTGACAGTTTCTCAGAAAGTGGGTTGACGTATTCTGGAG  
 GAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTTCTTGAAGTGGATCAT  
 GGCCAGGTCTTACAGCTCTCCACTGCCACCTTTGGCAAACATTCCTGGGATCCTGAAG  
 GCTCAGACAAGGCCCATCCCTCTTATGTTACCATGGGGATTATCTCTTCTCTCTTTCTC  
 TTTTAGTTTTCTCTCAAGGAAGGGTTGTCACTCTTTTCCAAAAGGAAGAAGGACCAAG

121475 AACTGCTACTACAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGTAGGGG  
 GGAGTTGGGGGAAATGGCGGGGGTGGGGTCCCTGACAGTTTCTCAGAAAGTGGGTTGA  
 CGTATTCTGGAGGAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTTCTT  
 GAAGTGGATCATGGCCAGGTCTTACAGCTCTCCACTGCCACCTTTGGCAAACATTCCT  
 GGGATCCTGAAGGCTCAGACAAGGCCATCCCTCTTATGTTACCATGGGGATTATCTCTT  
 [C, T]  
 CTCCTTTTCTCTTTTAGTTTTCCCTCCAAGGAAGGGTTGTCACTCCTTTTCCAAAAGGAA  
 GAAGGACCAAGTGAATGATTTTCAAGGGCACAGTGCTGTTATTTCTCGAGGGAACCTCTG  
 CCATGTTCTTGAGCATGTTGCTCGTTTTCTCTTCCCTTCTCTTCTTAGCCCTCTCCCTC  
 TCGCTCTCTCCTACCTCTCCCCCTTTTCTTTTCTTTCATCACAAGACTACAAAGAGT  
 ATACATGGTCACTGTAGAGGCCTTGGAAAATGCAGGGGAGTGCAAAGAAGAAAGTAAAAAT

121715 GGGATCCTGAAGGCTCAGACAAGGCCATCCCTCTTATGTTACCATGGGGATTATCTCTT  
 CCTCCTTTTCTCTTTTAGTTTTCCCTCCAAGGAAGGGTTGTCACTCCTTTTCCAAAAGGA  
 AGAAGGACCAAGTGAATGATTTTCAAGGGCACAGTGCTGTTATTTCTCGAGGGAACCTCT  
 GCCATGTTCTTGAGCATGTTGCTCGTTTTCTCTTCCCTTCTCTTCTTAGCCCTCTCCCTC  
 TCGCTCTCTCCTACCTCTCCCCCTTTTCTTTTCTTTCATCACAAGACTACAAAGAGT  
 [T, A]  
 ATACATGGTCACTGTAGAGGCCTTGGAAAATGCAGGGGAGTGCAAAGAAGAAAGTAAAAAT  
 CCTGTAAATATCCTTTGTCCAAAGAAATCCACCCTAACACGTTGATAATCGTACTTCTG  
 AATCTTTTCTCTGCATCTACATTTGGCCCCAATGCCTGGTGCTCCACTGGCCCCACAGTA  
 CCCCTCCCACCTGTACCTACCCTGTCCAAGTTTCCCTGCCCTCGGGTACTGGCAGGGGT  
 TGTACCGTGTCTGGCCACAGCCTGTGCCTTCCCTGTGTTACTCCATCAGCTCCTTCTG

122390 TTCTGCCTCAGAAGGGGGAGTGCTACTGTCTGCTGTCTAGAGCTGAGGGAGACGGACA  
 CCACTCTCCCCGGTAACACTAGATTCTCAGGAATAGATACAACACCTTCCAAACTGCAGC  
 TGACACCAGCTGTACATTGTAACAAGACTTTTAAGATTAGGAATGTCAGAGAGATATTA  
 CCCACAGCAGTTACATCACATCTGCTTACAGTCTGGCTGTTCTTGGAGCCCAGAATTCCA  
 GGCTGTTCAGGGTGTCCAATTGAGCTGTGCTCTTGACCTGCCTCGAGGCAGCTGAAGC  
 [C, A]  
 AGCTTGCCCTGACCTCCAGGAGTAGCTGTTGCAGGCAGGCAGCTTAGCTCAAAATGAGAG  
 AAAGTATGGCTAATTTAAACAAAAATGAAAATAATTTTAAAAAGGATATTGGATAGCTAC  
 CAAATCCTTGGGATGTTTGAACCCCAACTGGGAAGGTACCTTGTAAAAACAATGACC

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AAATCACACCATGGAACTGGTCCCGGAGGAAGCCACTGCTGTGTCTGCCCGGGCATATAC  
AGGGCGGTGGCCCCTGGATGCTGCTGCAAGAACCATCCTTGTGACTGCTCCTGGAGTGGG

- 122606 CTGTTCCTTGGAGCCCAGAATTCCAGGCCCTGTTCCAGGGTGTCCAATTGAGCTGTGTCTT  
GACCTGCCTCGAGGCAGCTGAAGCCAGCTTGCCCTGACCTCCAGGAGTAGCTGTTGCAGG  
CAGGCAGCTTAGCTCAAAATGAGAGAACTATGGCTAATTTAAACAAAATGAAAATAAT  
TTTAAAAAGGATATTGGATAGCTACCAAATCCTTGGGATGGTTGGAAACCCAACTGGGA  
AGGTACCTTGTTAAAAACAATGACCAAATCACACCATGGAACTGGTCCCGGAGGAAGCCA  
[C, T]  
TGCTGTGTCTGCCCGGGCATATACAGGGCGGTGGCCCCCTGGATGCTGCTGCAAGAACCAT  
CCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCCCTGGAATGGC  
TTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCCTGCCTGCCAC  
CCCACCTCCCATGGAAGCTCCCGCTGATGCTTCACTTCCATCTTGATCAAGGGCAAGG  
TTTACCTTCCATGCCACCCCACTCAGGGTTCAGTCCCTCACCTCTGTGCGAGGACCT
- 122767 AAACAAAATGAAAATAATTTTAAAAAGGATATTGGATAGCTACCAAATCCTTGGGATGG  
TTGGAAACCCAACTGGGAAGGTACCTTGTTAAAAACAATGACCAAATCACACCATGGAA  
CTGGTCCCGGAGGAAGCCACTGCTGTGTCTGCCCGGGCATATACAGGGCGGTGGCCCCCTG  
GATGCTGCTGCAAGAACCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGT  
ACCACCATCCCTGGAATGGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATA  
[T, C]  
GTCTGCTCCTGCCTGCCACCCACCTCCCATGGAAGCTCCCGCTGATGCTTCACTTCC  
ATCTTGATCAAGGGCAAGGTTTACCTTCCATGCCACCCCACTCAGGGTTCAGTCCCTC  
ACCCTCTGTGCGAGGACCTAGGAGGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGT  
GGTGAATCACCAGCAGAAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGAC  
GTTTGTCTTCCACCAACCCACCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTC
- 122957 CAAGAACCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCC  
CTGGAATGGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCC  
TGCTGCCACCCACCTCCCATGGAAGCTCCCGCTGATGCTTCACTTCCATCTTGATC  
AAGGGCAAGGTTTACCTTCCATGCCACCCCACTCAGGGTTCAGTCCCTCACCTCTGT  
CGGAGGACCTAGGAGGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGTGGTGAATCA  
[C, A]  
CAGCAGAAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGACGTTTGTCTT  
CCACCACCCACCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTCCCACTGTACT  
TTTGTCTCAGGCTGAGTGGCCATTCCGCCTTCTCTGTCTGTGTTCTTAACCCGGTCTT  
GCCTACTGTCTGGAAGAGGAGAAAGTGGTTCTGTAAGTCTGCCTCTGAGAATCTCCACAC  
CTCTTTTTCAGAATGGTCTGGGGAGTGGCGGTGCCAGTGAGACGAAAGAGGAGGACGGAG
- 122963 CCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCCCTGGAA  
TGGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCCTGCCTG  
CCACCCACCTCCCATGGAAGCTCCCGCTGATGCTTCACTTCCATCTTGATCAAGGGC  
AAGGTTTACCTTCCATGCCACCCCACTCAGGGTTCAGTCCCTCACCTCTGTGCGAGG  
ACCTAGGAGGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGTGGTGAATCACCAGCA  
[G, A]  
AAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGACGTTTGTCTTCCACCA  
CCCACCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTCCCACTGTACTTTGTCT  
CCAGGCTGAGTGGCCATTCCGCCTTCTCTGTCTGTGTTCTTAACCCGGTCTTGCCTAC  
TGTCTGGAAGAGGAGAAAGTGGTTCTGTAAGTCTGCCTCTGAGAATCTCCACACCTCTT  
TCAGAATGGTCTGGGGAGTGGCGGTGCCAGTGAGACGAAAGAGGAGGACGGAGGACAGA
- 124458 CTTTTTTGAGACGTAGTCTCACTCTGTTGCCAGGATGGAGTGAGTTACATGATCTCGG  
CTCACTGCAAGCTCTGCCTCCCGGGTTCAAGCGATTCCCTGCCTCAGCCTCCCAAGTAG  
CTGGGATTACAGGTACCTGCCACACACCTGGCTGATTTTGTGTTTTTAGTAGAGACAG  
GGTTTACCATATTGGCCAGGCTGGTCTCGAACTCCTGACCTCAAGTGATCCACCTACCT  
CTCGGCCTCCCAAAGTGTGGGATTACAGGCGTGAGCCACTGTGCCTGGCCCAGTGTAGT  
[C, G]  
CTTCTAAGCAAATCCATTCTAATCAAATGAAGGAACAGTGCTCCTCTTTAATAATCATAA  
ATAAGTGATAGATGAATAAGGAAATGAATCATGTATGCATTTATTTGTCCACAACACACA  
ATTGGAGCTGGCATTCTTCTGGAGGCATTTGTATAAACTTAGATGAGATCAGTCCCTTA  
GGATGTCAAGGTACTTGCCCTGATTCTGCCATGAGGCCTCCAATGGAACTTTGTGAGGA  
GTAGAAAACAGCCAATGTATGTGAAGTCCAAGTTCATTGGCACCTCCCTAGCCTCCTTGC

125449 AGCTTGAAAAATATGCTAAAGGAATTTTCTCATTTGTAGGTGTTCTGTCCAGTTCCTT  
AGTGCAGGCCCTTCCCAGTGTAGGGTTTATTTCTGCATGACTTCTATAAAGCTGTATTTC  
CTTCTTATCTAACTTCTCGTTCCTAGTCTAACTAGAAAGTTCATGCATATCCCTTTCTCC  
CTTCTCTCCATTTTCTTTTATCTCTGAAACAATTAGGTACACACGTAGCTGGGAAGCCT  
TCTTGATGCCTCCAGAAAAATCTAGATCCCTCAAACATTTGTTCTATCTCTTCTTTCT  
[G, A]  
TACCCCAATTTTTTCTCAATTATGCTCTTAAATTATCCTTCTGAAAGATTTTCTAATTT  
TGTTTGCTTCTTGTGCTTTTCTCTTCTAGTTCACACACCTTTCTCTGTAAGATTTCT  
TAATGCTTATTTTATTATTATTTATAGTTTTATGTGGACAAGCATCCCTAGATGCTTACA  
TTAAAAGTATTTGTCTAAAAAAGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAG  
AAAGAAAGAGAGATAAATATGGAAGAAAGAGAAAAAAGGAAGAAAGGAAGGAAGGAAG

126753 AACATGTCTTCTTCCGGGTGAACATTCACAAGCTAAAGAAGGGAAGTACCTTCCCTTG  
AGGAGAGCTTGCTGAACACCAGAGGATTTACCTCTTTCCCCCTTCATAATGGAATAATC  
ACTGAGCTTTCTGCTAGAATAAAAAAATCATGGCCGGGCACGGTGGCTCACGCCTGTAA  
TCCCAGCACTTTGGCAGACCGAGGCGGTGGATCACTTGAGGTGAGGAGTTCAAGACCAG  
CATGGCCAACATGGCGAAACCCCATCTCTACTAAAAATACAATCATTAGCTGGGCGTGGC  
[G, A]  
GTGCGCTCCTGTAATCTCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGG  
GAGCGGAAGTTGCACTGAGCTGAGTTTGGCCCACTGCACTCCAGCCTGGGCGACAAAGT  
GAGACTCTGCCTCAAAAAAATAAAAAATAAAATAAAATAAAATAAAATAAAATAAAATA  
TAAATAAAATAAAATAAAATAAGACAAAGGAGATGATAAATTAAGCCTAACATTACTA  
TATTCCCTTTTACTGAAGAATATGTTTATATCTGTGGAAGATGAGTTTCTTAATACA

126957 CGGGTGGATCACTTGAGGTGAGGAGTTCAAGACCAGCATGGCCAACATGGCGAAACCCCA  
TCTCTACTAAAAATACAATCATTAGCTGGGCGTGGCAGTGCCTCCTGTAATCTCAGCTA  
CTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCGGAAGTTGCAGTGAGCTG  
AGTTTGGCCCACTGCACTCCAGCCTGGGCGACAAAGTGAGACTCTGCCTCAAAAAATAA  
AATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAA  
[-, T, G]  
ACAAAGGAGATGATAAATTAAAGCCTAACATTACTATATTCCCTTTTACTGAAGAATAT  
GGTTTATATCTGTGGAAGATGAGTTTCTTAATACAACCTCAGAATTAGATAGGAGATCA  
CAAGGGGTAACCTCCAAAGGAAGGGGAGAGGAAGGGGCTGGGTTAACAGTTCTTGGGTC  
AGAATAAGAGTTGAGTGGCCATGTGTATTGCAGCAGGTGGAGCTCCCTATACAAGGAAG  
CACTGGGCGGAAAATGAGCATTTATCCTATTAGAATGGTCTTGTGCCTTCACTCCCTGT

126962 GGATCACTTGAGGTGAGGAGTTCAAGACCAGCATGGCCAACATGGCGAAACCCCATCTCT  
ACTAAAAATACAATCATTAGCTGGGCGTGGCAGTGCCTCCTGTAATCTCAGCTACTCGG  
GAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCGGAAGTTGCAGTGAGCTGAGTTT  
GCGCCACTGCACTCCAGCCTGGGCGACAAAGTGAGACTCTGCCTCAAAAAAATAAAATA  
AATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAAATAAGACAA  
[A, -]  
GGAGATGATAAATTAAAGCCTAACATTACTATATTCCCTTTTACTGAAGAATATGGTTT  
ATATCTGTGGAAGATGAGTTTCTTAATACAACCTCAGAATTAGATAGGAGATCACAAGG  
GGTAACCTCCCAAGGAAGGGGAGAGGAAGGGGCTGGGTTAACAGTTCTTGGGTGAGAT  
AAGAGTTGAGTGGCCATGTGTATTGCAGCAGGTGGAGCTCCCTATACAAGGAAGCACTG  
GGGCGGAAAATGAGCATTTATCCTATTAGAATGGTCTTGTGCCTTCACTCCCTGTGCACT

128567 TTAGTTCGGAGTCTCTCTCTGTTGCCAGGCTGGAGTGCAGTGGTGCAATCTTGGCTCGCT  
GCAACCTCTGCCTCCCGGTTCAAGTGATTCTCCCTGCCTCAGTCTCCTAAGTAGCTGGG  
ATTACAGACATCTGCCACCATGCCAGCTAATTTTGTATTTTTTAGTAGAGTTGGGGTT  
TCCCCATGTTGGCCAGGCAGGTCTTGAACCTCCTGACCTCAGCCTCCTGAAGAGCTGGGAT  
TACAGGTGTGAGCCAGCATGCCTGGCCTGAGTTTTTATTATTTGTGAATTTTATTTTTTT  
[T, -, C]  
CATCCAGATGCACCTATATTGGTAGTCTAGTGATAAAAAACAATTTACCCATATATACCA  
ACATCTTTTTCAAGAACTTTGCATAGTGAAACCAGCAAAGTACTGAACTGGCCAGTCTGT  
CATAGGTGTCTTGAACATGACTCAGAGTCAGAAGCTGGATATAAACTTTTTTCTGTGTG  
TGTATATATGATCCATTTGTGTATTTCGGCTTTTGAAGTGGGACTTTTTCAGTAGGCTTCTT  
GAAGGTTCCACTTCACTATTCTCACTGATGTGTGCTTACAGCATCTTGCCATGGAGATT

128567 TTAGTTCGGAGTCTCTCTCTGTTGCCAGGCTGGAGTGCAGTGGTGCAATCTTGGCTCGCT  
GCAACCTCTGCCTCCCGGTTCAAGTGATTCTCCCTGCCTCAGTCTCCTAAGTAGCTGGG  
ATTACAGACATCTGCCACCATGCCAGCTAATTTTGTATTTTTTAGTAGAGTTGGGGTT

FIGURE 3, page 101 of 107

TCCCCATGTTGGCCAGGCAGGTCTTGAACCTCTGACCTCAGCCTCCTGAAGAGCTGGGAT  
TACAGGTGTGAGCCAGCATGCCTGGCCTGAGTTTTTATTATTTGTGAATTTATTTT  
[T, -, C]

CATCCCAGATGCACCTATATTGGTAGTCTAGTGATAAAAAACAATTTACCCATATATACCA  
ACATCTTTTTCAAGAACTTTGCATAGTGAAACCAGCAAAGTACTGAACTGGCCAGTCTGT  
CATAGGTGTCTTGCAACATGACTCAGAGTCAGAAGCTGGATATAAACTTTTTCTGTGTG  
TGTATATATGATCCATTTGTGTATTTCGGCTTTTGAGTGGGACTTTTTTCAGTAGGCTTCTT  
GAAGGTTCCACTTCACTATTCTCACTGATGTGTGCTTACAGCATCTCTGCCATGGAGATT

128599 GAGTGCAGTGGTGCAATCTTGGCTCGCTGCAACCTCTGCCTCCCGGGTTCAAGTGATTCT  
CCCTGCCTCAGTCTCCTAAGTAGCTGGGATTACAGACATCTGCCACCATGCCAGCTAAT  
TTTTGTATTTTTTAGTAGAGTTGGGGTTTTCCCATGTTGGCCAGGCAGGTCTTGAACCTCC  
TGACCTCAGCCTCCTGAAGAGCTGGGATTACAGGTGTGAGCCAGCATGCCTGGCCTGAGT  
TTTTATTATTTGTGAATTTTATTTTTTCCATCCCAGATGCACCTATATTGGTAGTCTAG  
[T, G]

GATAAAAAACAATTTACCCATATATACCAACATCTTTTTCAAGAACTTTGCATAGTGAAAC  
CAGCAAAGTACTGAACTGGCCAGTCTGTCTATAGGTGTCTTGCAACATGACTCAGAGTCAG  
AAGCTGGATATAAACTTTTTCTGTGTGTATATATGATCCATTTGTGTATTTCGGCTTT  
TGAGTGGGACTTTTTTCAGTAGGCTTCTGAAGGTTCCACTTCACTATTCTCACTGATGTG  
TGCTTACAGCATCTCTGCCATGGAGATTTTAGGCAGAGAGTGTAAAGCTCTACTCAT

128843 ATTATTTGTGAATTTTATTTTTTCCATCCCAGATGCACCTATATTGGTAGTCTAGTGAT  
AAAAACAATTTACCCATATATACCAACATCTTTTTCAAGAACTTTGCATAGTGAAACCAG  
CAAAGTACTGAACTGGCCAGTCTGTCTATAGGTGTCTTGCAACATGACTCAGAGTCAGAAG  
CTGGATATAAACTTTTTCTGTGTGTGTATATATGATCCATTTGTGTATTTCGGCTTTGA  
GTGGGACTTTTTTCAGTAGGCTTCTGAAGGTTCCACTTCACTATTCTCACTGATGTGTGC  
[G, A, T]  
TACAGCATCTCTGCCATGGAGATTTTAGGCAGAGAGTGTAAAGCTCTACTCATAGTT  
TATAGAATTGCTAGTGCCACAAGGCCATTCTTGTGGATGATGAAATTATTAGTTATAAG  
TGAACCTTCTAAATAAATCTTGGAGAAAACATGTTATAAGAAAATGAAGTCAGTCCTC  
TTACTAGGCAGTTCCCATCATCTTTCCATTTTGAGAAATTATCCTCAGTTCAGATGTATT  
ACTATGGTGATGTGTTTGCATTTCAACAAACCAACCAAGCCGTAAACTGAGCTCTGCAT

130388 CGGAAGGATGATGAAAAATGGGACGGGGAGGTGGCTGAGCCTGGGGTTTTGGAAGTAGGA  
TGGAATTAATTGGAAGGCAAATAAAAAAGCTTCCAAGATTGTGAGCTGCGACTGTCTGAG  
AGCTCAAACCAGAGTTGGCAAGAGGAACCAAGGAGAATGAGGACATTTTTTGTCTATTGA  
CAATGAGGTATACAATATATCCAGGAAAGGACAACCAGCAGCGACCTCCTGAAGCTAAAC  
AGAGATTATCTTAAGCCACATATGAGGGAACATTCCTCAATGGCAAAGAGAAGCATTA  
[T, C]  
CTGGGACTGTCTACGTCTAAGGAAAAATTTGAGCATTTACATTAATAATGGCCTGTAAACA  
AGCATTGAATATTAACCAGGCACTGTGCTAAGTGTTCACACTTGTTTAATCTTCCAAA  
CAATCCGATGAGGTGGGATTTCTTATCTCCATTTTATAGAGGAAAAAACTAATGCACAG  
AGAGGTTGAGAACTTGCTTAAGGTCACTCAGCTATTTAGCAGTGGGGTTGGGATGTGTCT  
TCAGGCAGTCTTTCCCTAGACTCTGTGCTCTTAAACACTACTATGGTTTTTTCAGCAGCAG

131191 CTTTTTATAGCAAAGTATGGGTATACACATATTTTCATACACCTACACACACATACACAT  
GCAAGACGCGCATTTCTTAAGTCCCTAAAAATACCCTGATAATTAAATGCTCCAAACATTC  
TCTGAGTGTGACCTTTGGATGTCTAGGAGAAGCAGCCAGGAACACACTTGTAGCCGGG  
GCAATGAGTAGTGGTGAATGTTTACCTTGCTGATAAAGTCTCCAGTAGATGATGCAATT  
AAGATGCCACGATCTAGCCTTTGTTATACACCTCCTTGTCTGCCGTCAAACAAATCCACC  
[G, C]  
CTGTCCTTCCCCATCTTCCCTCCTGCCATCTCCTGAAGTCCAGGAACGTCTCCAGCTTC  
CTACGTACTTGCAGTCCTCTTTTGCCAACTCAACCTCATTTAGATTGCAATTACATTCA  
CATCTTAATTTATGACTTAACAAGCATCTCACAACATTTAATTCACTTTAACCTCACTA  
TGCATTTGAGGAGGAATATTTGAGGAGGAATGGTACTCCCATTTGCCAGCAATTAGATTGA  
CTTAATGATCTATGGCGAAATCTCCTTTTGGGCTTTGAACTTTTCATACATTTCTGCAA

132702 TCAGCTTAGAGTTTTTCAGCTTAGAGTCAATTCCAGTGTGCGCTTCAGCACATCCAAAGA  
GAATATGACCGATGCTACCACTCCTGCTCCTGGACTCCACTGGTATGATTCTTTGCCCC  
AGTATCAGTCTAATTTCCCATTTCTAGATGCTTTTTTCTTAATGACCCAACTGACTCCT  
TCAGGAGCTGGCATGAGATGAGATTTGTTTGCAGAGATGTAAAAATTTCAAAGCCCCA  
AAGGAGATTTACCACAGATCATTAAGTCCATCTAATTGTGCTCCTACTACCCATTAGA  
[C, T]

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GGGGACCCCTGTTATGCTAACTCCTATCCTGTCTCTTGTGAGTGATACAGTCAACACACAT  
GATGATCACAGCACCAGCTCAGACAGGTGTGTTTTAAACAAAAGTGTGTTATAAATGTA  
CAGCCTCAGCAGGAAAATGTGGGGCGAAGAAACACACAAATACCTGGCTAGAGTCGGT  
CACAGGTGAAGATGGGGATGACTGTGTTTTCCGTTTCATCCAAACATTTTGGCCTGACTC  
AGATAATTTTTTTTCCAGCATATTCTGTTTGACACAAGGGAAACGGTGCAAATCCATCAC

133422 GCATTTGGGCTGCAGTCATGGAACCATGCAAGAAACATTCAAAGCATTGGCTAAGCAGGA  
TTTTTTTGTGTTTGTGACCTGGTGTCCACGAACAGGCTTCAGGGAGCCTGAGAACCTCCT  
AGACCACTTGAAAAATTCTGAATGCACCTTTCTAGGAAAGAGTTCACAGCGTTCATCAAA  
TTTCTCCAAAGCAGCCAATGACCAGAGAAAGGTTAAAAGTCACTGACACAGTACCGTTTT  
CTGTGCATCTATATCCTGAATCCAGGGTGATGCCGCTGACTTGCCTATCTTTCTCCTTG  
[G, C]  
TCTTCTTAGAAAAAGCAAGTGAGTCAGACCAAGATCCGGGTCACTCTCAACCATCCTGTT  
ATCTTGGCCGGCTGCATTGTGTTTGTGACGATCCCTGCTGTCATCTTTAAGTACATCGAG  
GGCTGGACGGCCTTGGAGTCCATTACTTTGTGGTGGTCACTCTGACCACGGTGGGCTTT  
GGTGATTTTGTGGCAGGTAAGCACCTGGGCAGGCCAGGCACTGGGGCTCTGGCGGGAAA  
AATAATCTGTTGGCTGTGCTTTTCGCAATCGATAAAAGATGTTGCGGGAGAAGCAAATGA

133447 ATGCAAGAAACATTCAAAGCATTGGCTAAGCAGGATTTTTTTGTTTGTGACCTGGTGT  
CCACGAACAGGCTTCAGGGAGCCTGAGAACCCTCTAGACCACTTGAAAAATCTGAATGC  
ACTTTTCTAGGAAAGAGTTACAGCGTTTCATCAAATTTCCCTCCAAGCAGCCAATGACCAG  
AGAAAGGTTAAAAGTCACTGACACAGTACCGTTTTCTGTGCATCTATATCCTGAATCCAG  
GGTGATGCCGCTGACTTGCCTATCTTTCTCCTTTGGTCTTCTAGAAAAAGCAAGTGAGT  
[C, A]  
AGACCAAGATCCGGGTCACTCTCAACCATCCTGTTCACTCTGGCCGGCTGCATTGTGTTTG  
TGACGATCCCTGCTGTCATCTTTAAGTACATCGAGGGCTGGACGGCCTTGGAGTCCATTT  
ACTTTGTGGTGGTCACTCTGACCACGGTGGGCTTTGGTGATTTTGTGGCAGGTAAGCAC  
CTGGGCAGGCCAGGCACTGGGGCTCTGGCGGGAAAAATAATCTGTTGGCTGTGCTTTTCG  
CAATCGATAAAAGATGTTGCGGGAGAAGCAAATGAAGATGACTCAGTGTCACTACTGCTG

133956 CGGGAAAAATAATCTGTTGGCTGTGCTTTTCGCAATCGATAAAAGATGTTGCGGGAGAAG  
CAAATGAAGATGACTCAGTGTCACTACTGCTGTGAAGAGGCTCATTTCAAATCCCTAGTC  
CTATGTAATATAAATACCATAGGTTTTTTCTGCTATGAAAAGAAAGCCAACCTTTCCCT  
TCTCAGGATGCTTATTTCCCTTATCGTCACACAAATTATGCAAGACTAAAGTGAATTTCT  
CATTAAATCTTGAACCTCTGAATTGAATTAACCTCTCTAATCCAATGATAAAGGCTGTG  
[T, C]  
TAGGAAGTGGCACATAGGAACTCAGATGAGATTAGCATAGAATTTGGTCTGCAGTGACC  
TGCAGGTTTCAGCTTCCTGACTCCCAGGTGAGAGCCATTGTCTCTGCAAACGTTGTCTCTGC  
ACATGCCCAGATACAAAGCTGAGGACTTTGGTGAATATGGGGAGCTGAGAACTGCCCAGA  
GGGAATATAAGCTCATGGATTATGCAGGAGTGATATACAAAGCAATAGCCTTCCTTGTA  
AAATAAATGTGGATGAGCTATGTTTAAGGAAGTGAAGAAAAAATCATCAATTTTCATCTAG

134132 TCCTTCTCAGGATGCTTATTTCCCTTATCGTCACACAAATTATGCAAGACTAAAGTGAAT  
TTCTCATTAATCTTGAACCTCTGAATTGAATTAACCTCTCTAATCCAATGATAAAGGC  
TGTGTTAGGAAGTGGCACATAGGAACTCAGATGAGATTAGCATAGAATTTGGTCTGCAG  
TGACCTGCAGGTTTCAGCTTCCTGACTCCCAGGTGAGAGCCATTGTCTCTGCAAACGTTGT  
CCTGCACATGCCCAGATACAAAGCTGAGGACTTTGGTGAATATGGGGAGCTGAGAACTGC  
[C, T]  
CAGAGGGAATATAAGCTCATGGATTATGCAGGAGTGATATACAAAGCAATAGCCTTCCTT  
GTAAAAATAAATGTGGATGAGCTATGTTTAAGGAAGTGAAGAAAAAATCATCAATTTTCAT  
CTAGGGCCAGGGAATTGCAAATGAAATGAGATTTAGTTTCATATGTGCACCAAGTTTCCC  
AAAAGTGTGGTAGAAAGGTACGGATAGAAGGAAGAGGCCATCCTTCTCTTTTCTAATAG  
GATAGTTCTAGATGTTTCAGACAAGTGATCAGTTTCTACTACAAGAGTGAACACTTTGAT

136253 ACAGACCAATCTGGAGAATGCATGCCTGAAAAGACTGGAAGTTTATCTCTATCTTTTGGT  
AACAGTCTGCGAGTGATAGGAAGGTTGCCAATCATTTGGAAAACGATACATTAACAAGA  
GTTGATGGTGTCTGTGATTCGACATAGTATGAACTCTACTAGAAATGTAATCAGATCATT  
GATCCTGCAGGATTGATTGCTGATTTATTTTGCAGCTGACTCACTTTAGGACAGCCTTAC  
AATATTTCCCAACTCTGTCTGGGAGCACACACAGAACTCCGAATCCAGATAAGCAGCTCA  
[A, T]  
AAAGGGATACTTAGAAGGGTGTGACTGCCTGCTTCATTGTTCTTGTCTACTAGCGCAC  
CCTAGTGACCATCTTTGCTGGGTAATAGTGAAGTTCGAAAGGTAAATATTTACTCCCAGAT  
AGCCACAGGAGAAAGCTACAGATTTCTCTGGCGTAGCACAGAAACGAAATGAACCTCAA

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AAACCACTTACTGGTGC GGGAAGCTCAGATCGTATCCTACAGCTCTAATGATGCAGGAGAG  
AGTTGTCTGAAAGGAAAAACCAAAAGCAGCTGCACCAACCGAAGGGGGCTTGGCACAGA

- 137206 GGGCTTGCAACCTGTTTTGCATGGCTGCCCTCCAGCAGTGTCTGTAGGAAGGTTAGAATAA  
ATAGGCTAATTATTCAGAATAAATGACTGGTCCCTTTCAATGGAACAGCCAGTCAATGCAA  
TCAGGCAACTGGCCAATTTGGTTTGATGGATTTTACTGTAATCCTTATTTATAAAATAA  
AGGGATTGGCCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTCTAATTACTCAGCC  
TAACTGACCCCTTTGGAGTAGCACTATGTAACACCATTTCCTCAGTTAGCATTAAATCACT  
[G, T, A]  
TTGCTTGCATCAAAATCCCAGTAATGCCATTAAAGCTAATTTTACTTTACACATCCACT  
TGTCTCTTAGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAAGAATTCCAAACCAT  
AGGGGGTGGTATGATTATATTTGATTTTTATTAAAAATAAATTTAGAGAAGTTTAAGAAAA  
ACAATGACAACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGATTATTCATCCTTAACGC  
TCAGGTCAAGCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATTTCTGGTATTAAGG
- 137313 CCAGTCAATGCAATCAGGCAACTGGCCAATTTGGTTTGATGGATTTTACTGTAATCCTT  
ATTTATAAAATAAAGGGATTGGCCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTC  
TAATTACTCAGCCTAACTGACCCCTTTGGAGTAGCACTATGTAACACCATTTCCTCAGTTA  
GCATTAAATCACTATTGCTTGCATCAAAATCCCAGTAATGCCATTAAAGCTAATTTTACT  
TTCACACATCCACTTGTCTCTTAGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAA  
[C, A, G]  
AATTCCAAACCATAGGGGGTGGTATGATTATATTTGATTTTTATTAAAAATAAATTTAGAG  
AAGTTTAAGAAAAACAATGACAACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGATTAT  
TCATCCTTAACGCTCAGGTCAAGCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATT  
TCTGGTATTAAGGTTAGTGGTCAAGAATCGAGGGAAGTAAAGCCTTAAGTTAGGCTTTTT  
TGGGTAAGGGATGGGTACCCCCCTTGCCCTCTAACCCCGGTCCACCTTGTACACAGCAAA
- 137335 TGGCCAATTTGGTTTGATGGATTTTACTGTAATCCTTATTTATAAAATAAAGGGATTGG  
CCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTCTAATTACTCAGCCTAACTGACC  
CTTTGGAGTAGCACTATGTAACACCATTTCCTCAGTTAGCATTAAATCACTATTGCTTGC  
ATCAAAATCCCAGTAATGCCATTAAAGCTAATTTACTTTACACATCCACTTGTCTCTT  
AGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAAGAATTCCAAACCATAGGGGGTG  
[G, A]  
TATGATTATATTTGATTTTTATTAAAAATAAATTTAGAGAAGTTTAAGAAAAACAATGAC  
AACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGATTATTCATCCTTAACGCTCAGGTCAA  
GCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATTTCTGGTATTAAGGTTAGTGGTC  
AAGAATCGAGGGAAGTAAAGCCTTAAGTTAGGCTTTTTTGGGTAAGGGATGGGTACCCCC  
CTTGCCCTCTAACCCCGGTCCACCTTGTACACAGCAAACCTAACAGCTGAGTGTAAACA
- 137951 TTTACTACATGGAATGGAATATGTGTCTCTGCAAAGACCATATGCTAGATCATGGTTAA  
AGTAACATTTGGTTGTTTTAGGGGGGAAACGCTGGCATCAATTATCGGGAGTGGTATAAG  
CCCCTAGTGTGGTTTTGGATCCTTGTGGCCTTGCCCTACTTTGCAGCTGTCTCTCAGTATG  
ATCGGAGATTGGCTACGGGTTCTGTCCAAAAGACAAAAGAAGGTTAGGACCCCTTCCT  
AACCCTATGAATGTTCTGAGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCC  
[T, C]  
GTGGGCTGGAGTGTCTTCTGGCTCGGTTTTGTCAGGGGGAGCGGGGGCGGGTCATAGGCTT  
CCTCATGTTGAATCAGTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCT  
TTTTTTTGGCAGGTGAGAAAATATGGTGATTTCGTTTACCAGCCCATAAATCCTGGAAAAA  
CTAGTAAACAACAGCTGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACT  
ATGGCTGAGTGTGTGTGGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAG
- 138206 CCTGAGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGT  
TTCTGGCTCGGTTTTGCAGGGGGAGCGGGGGCGGGTCATAGGCTTCCTCATGTTGAATC  
AGTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCTTTTTTGGCAGGT  
GAGAAAATATGGTGATTTCGTTTACCAGCCCATAAATCCTGGAAAACTAGTAAACAACAG  
CTGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGT  
[G, C]  
TGTGGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACG  
CCAAGAATCTTTCTGATTGAGTAAGAACTGAAATCATCGAACATTGACCAGCTACGGG  
GAAGTGAGCCCAATGGGCTCTTTCACTTATCCCTCTTGGTTGTACATCCATAGAGAC  
AAATATACATCCCTGAGGAAGGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAA  
GACATATGAAGGAAAGATAGATTTTGTGATTAAAAATAAATATTCATGTAGCTCTCTTA

138207 CTGAGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGT  
TCTGGCTCGGTTTTGCAGGGGAGCGGGGGCGGGTCATAGGCTTCCTCATGTTGAATCA  
GTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCTTTTTTGGCAGGTG  
AGAAAATATGGTGATTCTGTTTACCAGCCCATAAATCCTGGAAAACTAGTAAACAACAGC  
TGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGTG  
[T, G]  
GTGGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACGC  
CAAGAATCTTTTCTGATTAGTAAGAACTGAAATCATCGAATGACCAGCTACGGGG  
AAGTGAGCCCAATGGGCCTCTTCACTTATCCCTCTTGGTTGTACATCCATAGAGACA  
AATATACATCCCTGAGGAAGGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAAG  
ACATATGAAGGAAAGATAGATTTTGTGATTAAAAATAAATATTATCATGTAGCTCTCTTAG

138210 AGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGTCT  
GGCTCGGTTTTGCAGGGGAGCGGGGGCGGGTCATAGGCTTCCTCATGTTGAATCAGTC  
CTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCTTTTTTGGCAGGTGAGA  
AAATATGGTGATTCTGTTTACCAGCCCATAAATCCTGGAAAACTAGTAAACAACAGCTGA  
TTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGTGTGT  
[-, G]  
GGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACGCCAA  
GAATCTTTCTGATTAGTAAGAACTGAAATCATCGAATGACCAGCTACGGGGGAAG  
TGAGCCCAATGGGCCTCTTCACTTATCCCTCTTGGTTGTACATCCATAGAGACAAAT  
ATACATCCCTGAGGAAGGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAAGACA  
TATGAAGGAAAGATAGATTTTGTGATTAAAAATAAATATTATCATGTAGCTCTCTTAGGAA

138805 TAGGAAGAGAGGAAAAGAAAGGAGGAAGGCCAAGGAAGGAGAAAAAAGAGCTAAAAGA  
AAGGAAGGAGATAAGAAAAACCAAAGAAATAGAGGGCCAGCCTCTGTTTGCTTCATTCT  
GTATAAAGGCCCCAGGAGAAAGTTGCTGAATGGAGAGATTTCCACATCAGTTTCCTGG  
GCCCATATGCTAATTTCTCTGGTTTATATAAGTAAGCCAGGAAAGTAAGCAATGCAATTT  
CCAGACCGGTTCCCCAGACAGCTAACTGACCTGCTGAAAATCAGCTATAACAAAAGAGAA  
[G, C]  
GGAACAACATGAATATTGACTTTCCTGGATGCACAAATTTGAGTTTCCTCATTTGCAGAGG  
GAAGCATGGGACTTATACTGTCTGCCCTGTTTATTAAGAGCCAAGAAATTTGGTGCTGAT  
CCTCAGGCAAACTCCACTCTAAGGAGGCCTGTTCTGTGGGCTTTGGCAGAAATAGGCGT  
CTTCTGTGACCCTGACTGGGGGAAGTGGGTTACCAGGTGCCCTGGAGCATCTCTTAAAC  
CAGGGAAGGCCCCACAGCACATGACCATAGCATGGCCAGATAGGGTGGCCACCCATCCC

140339 ACCTCCAGACTCACCAAGAGGAAAAACAAGGACCTCAAAAAGACCTTGCCCGAGGACGTT  
CAGAAAATCTACAAGACCTTCCGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGGAG  
ACGGAAGAGATGTGTAACCTCAGACAACCTCCAGCACAGCCATGCTGACGGACTGTATCCAG  
CAGCACGCTGAGTTGGAGAACCGAATGATACCCACGGACACCAAAGACCGGGAGCCGGAG  
AACAACTCATTACTTGAAGACAGAACTAAATGTGAAGGACATTGGTCTTGGACTGAGCG  
[-, T]  
TGT  
CTTTTTTAGTCCAAAATTACATAGCATTGAAGAATATATTTCACTGTGCCATAAACAACTG  
AAAGCTTGCTCTGCCAAAAGGAATCAGAGAACAAGAACTTCATTTAGATAGCAAACGCA  
GGACACACCAAGAGTGTCCGTGCACGTAGCCGGTTCTGGCCGTACATGTTAAGGGCATT  
CAGTGGCAGTGCTGTACCCCTGGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGC

140340 CCTCCAGACTCACCAAGAGGAAAAACAAGGACCTCAAAAAGACCTTGCCCGAGGACGTT  
AGAAAATCTACAAGACCTTCCGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGGAGA  
CGGAAAAGATGTGTAACCTCAGACAACCTCCAGCACAGCCATGCTGACGGACTGTATCCAGC  
AGCACGCTGAGTTGGAGAACCGAATGATACCCACGGACACCAAAGACCGGGAGCCGGAGA  
ACAATCATTACTTGAAGACAGAACTAAATGTGAAGGACATTGGTCTTGGACTGAGCGT  
[-, G, T]  
GT  
TTTTTAGTCCAAAATTACATAGCATTGAAGAATATATTTCACTGTGCCATAAACAACTGA  
AAGCTTGCTCTGCCAAAAGGAATCAGAGAACAAGAACTTCATTTAGATAGCAAACGCGAG  
GACACACCAAGAGTGTCCGTGCACGTAGCCGGTTCTGGCCGTACATGTTAAGGGCATTCT  
AGTGGCAGTGCTGTACCCCTGGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGCT

140360 AAAAAACAAGGACCTCAAAAAGACCTTGCCCGAGGACGTTAGAAAATCTACAAGACCTTC  
CGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGGAGACGGAAGATGTGTAACCTCA  
GACAACCTCCAGCACAGCCATGCTGACGGACTGTATCCAGCAGCACGCTGAGTTGGAGAAC

FIGURE 3, page 105 of 107

GGAATGATACCCACGGACACCAAGACCGGGAGCCGGAGAACAACTCATTACTTGAAGAC  
AGAAACTAAATGTGAAGGACATTGGTCTTGGACTGAGCGTTGTGTGTGTGTGTGTGTG  
[-, T]  
GTTTTTAATATTCACACTGAGACATGTGCCTTAAACAGACTTTTTAGTCCAAAATTACAT  
AGCATTGAAGAATATATTTCACTGTGCCATAAACTGAAAGCTTGCTCTGCCAAAAGG  
AATCAGAGAACAAGAACTTCATTTAGATAGCAAACGCAGGACACACCAAGAGTGTCCGT  
GCACGTAGCCGGTTCTGGCCGTACATGTTAAGGGCATTTCAGTGGCAGTGTGTACCCT  
GGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGCTATTCCTTAGACCAGCCTCCT

140366 AAGGACCTCAAAAAGACCTTGCCCGAGGACGTTTCAAGAAATCTACAAGACCTTCCGGAAT  
TACTCCCTGGACGAGGAGAAGAAAGAGGAGGAGACGAAAAGATGTGTAACCTCAGACAAC  
TCCAGCACAGCCATGCTGACGGACTGTATCCAGCAGCAGCTGAGTTGGAGAACGGAATG  
ATACCCACGGACACCAAGACCGGGAGCCGGAGAACAACTCATTACTTGAAGACAGAAAC  
TAAATGTGAAGGACATTGGTCTTGGACTGAGCGTTGTGTGTGTGTGTGTGTGTGT  
[T, -]  
AATATTCACACTGAGACATGTGCCTTAAACAGACTTTTTAGTCCAAAATTACATAGCATT  
GAAGAATATATTTCACTGTGCCATAAACTGAAAGCTTGCTCTGCCAAAAGGAATCAG  
AGAACAAGAACTTCATTTAGATAGCAAACGCAGGACACACCAAGAGTGTCCGTGCACGT  
AGCCGGTTCTGGCCGTACATGTTAAGGGCATTTCAGTGGCAGTGTGTACCCTGGGCAG  
TGCTACCTGGGCACACACGTAGACAAGGGCAGCTATTCCTTAGACCAGCCTCCTGAAAGA

141183 TTGGAAGCAGATCAGAGCACACGTACGAAAAGGTGCAATTGCTTTTCTCATGACAAAAGA  
AAAAAATAATCACAAACACATCACACTGTGGATATCACCTAACCAATGACAGAAGCCT  
GCTGAGTTTGGTCTTCTCACAGGGGTAGGTAGTCCACATGAACCTGGCGAGCAGTGGTGA  
AAACATGACATCAACTGCTGCGTGGTTAAAGGCCAATCATGCATTTTCTCAGTGGGTGC  
AATGGTGACAATAAACTGATTGGAAATGTCCATGTACTTTGGTTATAACTTGTTTTGAT  
[A, G]  
AGAGGGGTAGAAATACCAAAACAATTGCCTTGCGATGATGCCAGTGGCTTGCTGTTCTGTC  
TAGCTGATCCTACATTTTACAAAAGTAGACATCCTGCATTTCTGAGACACACTGAGGAG  
GACCATGGCATCTTTCCATCTCAGGGCTTTTTGTCCCTTGGGTGTCTTAGGGTAGACATA  
GTGATAAGATCCAATCTCGCTATCTCCAAACAAAAGAAAATGTACCCCTTGACAGTAA  
GCTTGAAATGTTTTATTTGCTTGACGCGTAAGTGCCATTAATTCATTTAACAAATGATAC

141545 AGCTGATCCTACATTTTACAAAAGTAGACATCCTGCATTTCTGAGACACACTGAGGAGG  
ACCATGGCATCTTTCCATCTCAGGGCTTTTTGTCCCTTGGGTGTCTTAGGGTAGACATAG  
TGATAAGATCCAATCTCGCTATCTCCAAACAAAAGAAAATGTACCCCTTGACAGTAA  
CTTGAAATGTTTTATTTGCTTGACGCGTAAGTGCCATTAATTCATTTAACAAATGATACT  
TAGAAATATTTAAATATTTTCACTTTTACTTTTATGTTTGGGCATTCTTTATTTCTGAAAA  
[A, T]  
GTCACCATGCTCCTTGCTTGTCTTCTACATCTCACATCGGTTACTCACTAAAACCTGGAAC  
ACCCTAGACTGATTGTTCCAGGCAACGATAAGCTAACACATCATAATTATGATTGGTCT  
TGTGAGGCTAGAACATCCCGCAGAGGAAAGTCCGGGAATGGCTAGTCTAGGTTGCATGA  
TGATTTTAAATGGGTTTGTATCAGAAAGGGGAAAATACATACTCCTGTGTATGCCTCAGT  
CTTTATCATAATTGGCTGGTTCACAGCTAGCTCTTTGGGCCACACGTGAAAGCATTTGGA

142316 TTGTACCCACGACATCCTCAACCACTGGTACCATGGAAGACCTGTCCCTGCCCATTTCTC  
AAAAATGCACAGCTCTTCCCTGCCTGGAGCACATGAAGTCCCATCTCCCTGTCCCGAGAC  
CTTTAGGCTCTGTTGAAGTTCTGGCATTGCTTATGAGACCCCTTCTGTCCAAGGAAGGTC  
TAAGTCAACTCCTCCATTGGACTGGAGATGAGGCTCACTGGTGACATCCTGTGTGACTC  
AGTAATAAATAGTCATTGGGAGGCGATGTTTATGCAGGTGTGGATGTTGAGTTTACTA  
[C, T]  
GGGAATCATTTCCAGCCTGACAAAATGTGTTTTAAGGAATAGGTAGATAACTGGGACTTCC  
TCTGTTATTCTAACAAGTCGAAGCTTCCTAATTAACTGTCCATGGATCTCACTTATTTG  
GTTTCCACTCTGTGTTATCTGGTACGTTCTTTGTAGCAGTGTGTTAAAAATCCAGGCCCT  
ACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTTATCCAGTGCCTTCTGTGGGCCAGGCA  
CAGGATTAGGCATTTATGAACGTACGCTCATTGAACTTCACGACACTATGTGGGAAGT

142436 CTTTAGGCTCTGTTGAAGTTCTGGCATTGCTTATGAGACCCCTTCTGTCCAAGGAAGGTC  
TAAGTCAACTCCTCCATTGGACTGGAGATGAGGCTCACTGGTGACATCCTGTGTGACTC  
AGTAATAAATAGTCATTGGGAGGCGATGTTTATGCAGGTGTGGATGTTGAGTTTACTA  
TGGGAATCATTTCCAGCCTGACAAAATGTGTTTTAAGGAATAGGTAGATAACTGGGACTTC  
CTCTGTTATTCTAACAAGTCGAAGCTTCCTAATTAACTGTCCATGGATCTCACTTATTT  
[T, C, G]

FIGURE 3, page 106 of 107

142719 142779 142931

GTTTCCACTCTGTGTTATCTGGTACGTTCTTTGTAGCAGTGTGTTAAAATTCAGGCCCT  
ACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTGCCTTCTGTGGGCCAGGCA  
CAGGATTAGGCACTTTATGAACGTCAGCTCATTGAACTTCACGACACTATGTGGGAAGT  
ATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGGGAAGCTATGTTATTTATC  
CAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAGTCTGACCAAAGTCTGCTT

142719 ATGGATCTCACTTATTTGGTTTCCACTCTGTGTTATCTGGTACGTTCTTTGTAGCAGTGT  
GTTAAAATTCAGGCCCTACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTG  
CCTTCTGTGGGCCAGGCACAGGATTAGGCACTTTATGAACGTCAGCTCATTGAACTTCA  
CGACACTATGTGGGAAGTATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGG  
GAAGCTATGTTATTTATCCAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAG  
[G, T]  
CTGACCAAAGTCTGCTTTCAACTTCACTACAGTGTCTGTGTCATGCATCCTTGTGATTGT  
GTGTGTTTGTGTGTATGTGTCTTTCTAGCTTCATGGACACAGCTTACAGATGTGGGGA  
GCAGATATGGTGGAAATCTCCACCACCAAGAGGGCACAAGGTCTTTGTGTAAACATGGCTC  
AAAGGGTTGCCCCTGACACACCTACTGTACATTTATTTGGTTTTGGAAATTTGTATGT  
GGCACCTTTAAAAAATGCCCTTTGAAAGCACTCTTTTGCACTTTACTTGCTAACTTTGT

142779 GTTAAAATTCAGGCCCTACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTG  
CCTTCTGTGGGCCAGGCACAGGATTAGGCACTTTATGAACGTCAGCTCATTGAACTTCA  
CGACACTATGTGGGAAGTATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGG  
GAAGCTATGTTATTTATCCAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAG  
TCTGACCAAAGTCTGCTTTCAACTTCACTACAGTGTCTGTGTCATGCATCCTTGTGATTG  
[T, C]  
GTGTGTTTGTGTGTATGTGTCTTTCTAGCTTCATGGACACAGCTTACAGATGTGGGGA  
GCAGATATGGTGGAAATCTCCACCACCAAGAGGGCACAAGGTCTTTGTGTAAACATGGCTC  
AAAGGGTTGCCCCTGACACACCTACTGTACATTTATTTGGTTTTGGAAATTTGTATGT  
GGCACCTTTAAAAAATGCCCTTTGAAAGCACTCTTTTGCACTTTACTTGCTAACTTTGT  
AGAAACTCTGCATACAGCAGGAATAAAATAGTTCAAAGCACTAAGCTGCATACTCTACCA

142931 TATATACACAAGGACACAGAGGCTCAGGGAAGCTATGTTATTTATCCAATGGCACACAGC  
AAGAAAGTGGTAGAGCTGGTATTCAAAGTCTGACCAAAGTCTGCTTTCAACTTCACTACA  
GTGTCTGTGTCATGCATCCTTGTGATTGTGTGTGTTTGTGTGTATGTGTGTCTTTCTAGC  
TTCATGGACACAGCTTACAGATGTGGGAGCAGATATGGTGGAAATCTCCACCACCAAGAG  
GGCACAAAGGTCTTTGTGTAAACATGGCTCAAAGGGTTGCCCCTGACACACCTACTGTAC  
[A, C]  
TTTATTTGGTTTTGGAAATTTGTATGTGGCACCTTTAAAAAATGCCCTTTGAAAGCAC  
TCTTTTGCACTTTACTTGCTAACTTTGTAGAACTCTGCATACAGCAGGAATAAAATAGT  
TCAAAGCACTAAGCTGCATACTCTACCAAATGGAACAGGTGCATGTGTTGGTATGTGCAT  
AGATGCTTCCCCAAATGAGTCAAATCAGTCACACAGAGGGATCAAACATAACCTTGGGCT  
GGGGGTGGGAAAATTTTCTACATAACCCATTCCCTGAGACATTTGGCCAAGAATGTGATG